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aeromet

MONTHLY PROGRESS REPORT NO. 16
for the period June 1-30, 1977
to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

1860 Lincoln St., Suite 900
Denver, CO 80203

Contract No. 68-01-1946

Colorado C-b Tract

aeromet inc.

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by

Aeromet, Inc.
P.O. Box 45447
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Colorado C-b Tract

1.0 INTRODUCTION

Low level temperature and wind data were collected for June, 1977 at Casper, Wyoming; near the Colorado C-b Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville Utah; Rock Springs, Wyoming; and the U-a/U-b Tract 5 miles south of Bonanza, Utah. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made $\frac{1}{2}$ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built-in Rustrak strip chart recorder and the temperature was recorded within the range from -50°C to $+50^{\circ}\text{C}$. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into seven parts, one corresponding to each of the seven field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary Section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Colorado C-b Tract Field Summary

This month concluded the sixteen month collection of low level temperature and wind data at the Colorado C-b Tract. Arrangements were made to move the launch site back up on the C-b Tract. Pibals were released once again on 13 June, however, the site was not manned on the weekends. To maintain a good statistical base Saturday launches were done on Friday and Sunday launches were done on Monday.

Sixty-seven percent of the scheduled pibal launches were attempted resulting in 67% recovery of the temperature and wind data.

Aeromet, Inc. wishes to thank the personnel at the Tract for the use of their facilities and for conducting the pibal observations.

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release $\frac{1}{2}$ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analysis 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT ($^{\circ}C/100m$)	WIND SPEED
A	<-1.9	≤ 2
B	$-1.9 - -1.7$	≤ 5
C	$-1.7 - -1.5$	≤ 6
D	$-1.5 - -0.5$	ALL SPEEDS
E	$-0.5 - 1.5$	≤ 5
F	>1.5	≤ 3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

if the $\Delta T/100\text{m}$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of $1.7^\circ\text{C}/100\text{ m}$ and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

[illegible]

and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. NUMBER
Casper, Wyoming	1
Colorado C-b Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6
Utah U-a/U-b Tract	7

The month and season number codes are as follows:

MONTH	1-12
SEASON	13 = DJF
	14 = MAM
	15 = JJA
	16 = SON
ANNUAL	17

PILOT BALLOON SUMMARY
Colorado C-b Tract
June, 1977

June 2 through June 12 no data were collected because of the previous observers resigning. Arrangements were made to find a new observer.

June 13	0648	Temperature values were interpolated over the interval from 19 3/4 to 22 3/4 minutes.
	1300	Temperature values were interpolated over the intervals from 4 1/4 to 7 minutes and from 13 to 15 minutes.

June 14	0702	
	1310	

June 16	0656	Temperature values were interpolated over the interval from 2 to 4 3/4 minutes.
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1346

June 17	0700	
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1200

June 20	0700	
---------	------	--

1300

June 22	0734	
---------	------	--

1257

June 24	0649	
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1304

PILOT BALLOON SUMMARY
Colorado C-b Tract
June, 1977

June 27	0730	
	1301	
June 28	0644	Temperature values were interpolated over the interval from 1/2 to 3 1/4 minutes.
	1309	Temperature values were interpolated over the interval from 10 3/4 to 13 1/4 minutes.
June 30	0737	Temperature values were interpolated over the interval from 21 1/4 to 27 1/2 minutes.
	1250	

AVERAGE MIXING LAYER HEIGHT

Colorado C-b Tract

June, 1977

HEIGHT IN METERS

DATE	MORNING			AFTERNOON		
	0°	+5°	+10°	0°	+5°	+10°
2						
4						
6						
8						
10						
12						
13	25m	2950m	N/D	300m	N/D	N/D
14	sfc	650m	3300m	N/D	N/D	N/D
16	75m	550m	3150m	2500m	3700m	N/D
17	sfc	325m	1500m	425m	1475m	N/D
20	sfc	2825m	N/D	300m	925m	N/D
22	600m	1500m	N/D	3850m	N/D	N/D
24	sfc	600m	1900m	3400m	N/D	N/D
27	650m	N/D	N/D	1000m	3000m	N/D
28	100m	900m	2800m	175m	1150m	N/D
30	200m	1350m	3200m	625m	N/D	N/D

CLOUD COVER AND SIGNIFICANT WEATHER
Colorado C-b Tract
June, 1977

<u>DATE</u>	<u>MORNING</u>	<u>AFTERNOON</u>
2		
4		
6		
8		
10		
12		
13	clear	clear
14	clear	scattered
16	scattered	overcast
17	broken	broken
20	overcast	clear
22	clear	broken
24	broken	scattered
27	clear	broken
28	overcast	broken
30	overcast	overcast

 COL CB TRACT ELEV 2088 METERS SOUNDING ID 0
 DATE 06/13/77 TIME 06:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.45	-1.15

 COL CB TRACT ELEV 2088 METERS SOUNDING ID 612
 DATE 06/13/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	76.	0.22	0.0

 COL CB TRACT ELEV 2088 METERS SOUNDING ID 4620
 DATE 06/14/77 TIME 07:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	229.	0.55	0.0

 COL CB TRACT ELEV 2088 METERS SOUNDING ID 0
 DATE 06/14/77 TIME 13:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.0	-5.88

 COL CB TRACT ELEV 2088 METERS SOUNDING ID 0
 DATE 06/16/77 TIME 06:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	572.	0.37	-5.25

 COL CB TRACT ELEV 2088 METERS SOUNDING ID 0
 DATE 06/16/77 TIME 13:46MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.16
100.	250.	-1.03
250.	500.	-1.08
500.	750.	-1.00
750.	1000.	-0.97
1000.	1500.	-1.01

DATE 06/17/77 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	381.	0.42	0.0

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4902

DATE 06/17/77 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
374.	412.	0.0	-1.19

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4598

DATE 06/20/77 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
267.	305.	0.0	-0.74

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4602

DATE 06/20/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
282.	473.	0.0	-1.25

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4011

DATE 06/22/77 TIME 07:34MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
326.	402.	0.49	-1.86

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4608

DATE 06/22/77 TIME 12:57MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.01
100.	250.	-0.76
250.	500.	-1.02
500.	750.	-0.92
750.	1000.	-1.06
1000.	1500.	-1.05

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4908

DATE 06/24/77 TIME 06:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.94	-0.47

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4908

DATE 06/24/77 TIME 06:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.94	-0.47

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4906

DATE 06/24/77 TIME 13:04MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-3.26
100.	250.	-0.56
250.	500.	-1.14
500.	750.	-0.98
750.	1000.	-1.00
1000.	1500.	-1.02

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4904

DATE 06/27/77 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
360.	400.	0.0	-1.27

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4907

DATE 06/27/77 TIME 13:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.21
100.	250.	-0.68
250.	500.	-0.77
500.	750.	-0.78
750.	1000.	-0.99
1000.	1500.	-0.94

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4905

DATE 06/28/77 TIME 06:44MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	152.	0.0	-1.06

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4903

DATE 06/28/77 TIME 13:09MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
168.	473.	0.29	-1.28

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4901

DATE 06/30/77 TIME 07:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

DATE 06/30/77 TIME 07:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE
METERS AGL

206.

INV TOP
METERS AGL

320.

INV DT/DZ
(DEG C)/100M

0.16

DT/DZ BELOW INV
(DEG C)/100M

-1.08

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4899

DATE 06/30/77 TIME 12:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE
METERS AGL

410.

INV TOP
METERS AGL

448.

INV DT/DZ
(DEG C)/100M

0.0

DT/DZ BELOW INV
(DEG C)/100M

-1.33

HOLZWORTH IS CLASSIFICATION SCHEME FOR INVERTIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	8FC	1- 10	INVERSION 101- 250	BASE HEIGHT (M) 501- 750	1000- 1500	2000- 2500	3000- 3500	TOTAL
1000	1	100	0	0000	0000	0000	0000	1000
2500	1	100	0	0000	0000	0000	0000	1000
7500	1	100	0	0000	0000	0000	0000	1000
10000	1	100	0	0000	0000	0000	0000	1000
15000	1	100	0	0000	0000	0000	0000	1000
INV. TOTAL	3	5	2	0	0	0	0	16
DT/DZ	5	5	2	0	0	0	0	12
FROM BASE	5	5	2	0	0	0	0	12
SFC	5	5	2	0	0	0	0	12
NO INV TOT	5	5	2	0	0	0	0	12
DT/DZ FOREST	5	5	2	0	0	0	0	12
LAYER V	5	5	2	0	0	0	0	12
AS BASE	5	5	2	0	0	0	0	12

MONTH: JUNE YEAR: 1977 COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 GOL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE B STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

AVG SPEED 0.0

TOTAL 0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: JUNE YEAR: 1977 COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
NNE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
ESE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SSE	0.00	0.06	0.00	0.00	0.06	0.00	0.00	0.12
S	0.00	0.06	0.12	0.00	0.00	0.06	0.00	0.24
SSW	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.06
WSW	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
W	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.06
WNW	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.06
NNW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.12

AVG SPEED 1.5 5.3 8.0 17.6 29.1 0.0
TOTAL 0.25 0.31 0.31 0.06 0.06 1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.80

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA



MONTH: JUNE

YEAR: 1977

COL CB TRACT

SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.25
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.25
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.25	0.25	0.0	0.0	0.0	0.0	0.0	0.50
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.1	3.5	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.75	0.25	0.0	0.0	0.0	0.0	0.0	1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.20

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA



MONTH: JUNE YEAR: 1977 COL OB TRACT SEC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA



MONTH: JUNE YEAR: 1977 COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.10	0.00	0.00	0.00	0.00	0.00	2.1	0.10
NE	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
E	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
SE	0.05	0.05	0.00	0.00	0.00	0.00	2.2	0.10
SSE	0.05	0.00	0.00	0.00	0.00	0.00	2.0	0.05
SS	0.00	0.05	0.00	0.00	0.05	0.00	1.7	0.05
SSH	0.00	0.05	0.10	0.00	0.00	0.05	2.0	0.20
SWSH	0.05	0.00	0.05	0.00	0.00	0.00	0.7	0.05
SH	0.05	0.00	0.00	0.00	0.00	0.00	0.5	0.05
NW	0.00	0.05	0.05	0.00	0.00	0.00	2.5	0.05
NNW	0.00	0.05	0.00	0.00	0.00	0.00	2.3	0.05
N	0.05	0.00	0.05	0.00	0.00	0.00	2.4	0.10

AVG SPEED 1.3 5.0 8.0 17.6 29.1 0.0

TOTAL 0.35 0.30 0.25 0.05 0.05 1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

CDL CB TRACT

ELEV 2088 METERS

SOUNDING ID 0

DATE 06/13/77 TIME 06:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		17.98		0.0		0.0	0.
1.0	150.	2238.	17.45	-0.53	-1.76	1.16	3.3	105.
2.0	300.	2388.	16.37	-1.08	-1.95	0.98	2.9	136.
2.7	412.	2500.	14.92	-1.08	-2.85	0.08	2.5	135.
3.7	500.	2588.	14.39	-1.08	-1.79	0.14	2.1	168.
5.0	912.	3000.	11.91	-2.49	-2.35	0.58	6.6	201.
12.3	1912.	4000.	1.88	-10.02	-3.38	-0.45	4.5	175.
18.8	2912.	5000.	-5.55	-7.44	-1.73	1.20		

CDL CB TRACT

ELEV 2088 METERS

SOUNDING ID 0

DATE 06/13/77 TIME 06:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	0.0	0.0	0.0	0.
0.5	76.	2164.	0.7	0.1	0.7	85.
1.0	152.	2240.	3.3	0.9	3.4	106.
1.5	229.	2317.	2.3	0.0	2.4	130.
2.0	305.	2393.	2.0	0.0	2.1	136.
2.5	381.	2469.	2.3	0.0	2.4	130.
3.0	457.	2545.	1.2	0.0	1.0	142.
3.5	533.	2621.	0.3	0.0	0.2	188.
4.0	610.	2698.	0.0	0.0	0.0	178.
4.5	686.	2774.	0.6	0.8	0.8	187.
5.0	762.	2850.	1.1	0.5	0.7	201.
5.5	847.	2935.	1.1	0.4	0.1	196.
6.0	923.	3011.	0.0	0.0	0.6	202.
6.5	999.	3087.	0.2	0.0	0.0	208.
7.0	1087.	3175.	0.0	0.6	0.1	203.
7.5	1166.	3254.	0.5	0.0	0.0	210.
8.0	1243.	3331.	0.4	0.0	0.9	210.
8.5	1319.	3407.	0.0	0.0	0.3	208.
9.0	1403.	3491.	0.7	0.3	0.9	203.
9.5	1482.	3570.	1.1	0.4	0.8	201.
10.0	1559.	3647.	1.3	0.0	0.5	194.
10.5	1637.	3725.	1.1	0.0	0.5	193.
11.0	1715.	3803.	0.6	0.8	0.9	188.
11.5	1791.	3879.	0.0	0.5	0.5	178.
12.0	1867.	3955.	0.2	0.0	0.6	177.
12.5	1946.	4034.	0.5	0.4	0.4	173.
13.0	2027.	4115.	0.0	0.0	0.4	173.
13.5	2103.	4191.	0.0	0.0	0.3	171.
14.0	2180.	4268.	0.3	0.0	0.0	165.
14.5	2256.	4344.	0.0	0.0	0.0	167.
15.0	2332.	4420.	0.0	0.0	0.0	170.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 612

DATE 06/13/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		25.26		0.0		6.2	200.
0.9	? 150	2238	24.03	-1.23	-6.48	-3.55	6.9	193.
1.4	? 300	2388	22.26	-1.77	-6.88	-3.96	10.7	190.
1.7	? 412	? 2500	21.31	-0.95	-6.95	-4.02	11.6	190.
1.9	? 500	2588	20.42	-0.89	-6.95	-4.02	11.3	190.
3.9	912	3000	16.82	-3.59	-2.30	0.63	9.0	183.
6.7	1912	4000	9.14	-7.69	-2.38	0.55	4.8	149.
15.6	2912	5000	-0.89	-10.03	-3.36	-1.43		
21.6	3912	6000	-9.97	-9.08	-3.50	-0.57		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 612

DATE 06/13/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088	2.1	5.8	6.2	200.
0.5	76.	2164	1.8	4.1	4.5	204.
1.0	173	2261	1.3	4.1	4.5	190.
1.5	348	2436	0.0	11.7	11.8	190.
2.0	524	2612	0.0	11.0	11.2	191.
2.5	683	2771	0.7	11.9	12.0	184.
3.0	780	2868	0.3	8.0	8.0	182.
3.5	857	2945	0.1	8.1	8.2	188.
4.0	933	3021	0.1	9.3	9.3	181.
4.5	1011	3099	1.1	2.6	3.3	153.
5.0	1109	3181	1.2	2.6	3.3	153.
5.5	1185	3273	1.1	3.7	4.4	154.
6.0	1267	3355	1.2	5.2	5.5	167.
6.5	1354	3442	1.0	6.7	6.9	167.
7.0	1477	3565	1.0	7.1	7.2	172.
7.5	1583	3671	0.4	3.9	4.0	185.
8.0	1659	3747	0.2	6.4	6.4	179.
8.5	1735	3823	0.0	7.6	7.7	166.
9.0	1812	3900	0.7	7.9	8.0	161.
9.5	1888	3976	0.5	7.4	7.4	134.
10.0	1964	4052	0.0	4.6	4.6	179.
10.5	2044	4132	0.3	3.9	3.8	132.
11.0	2147	4235	0.0	3.0	3.6	146.
11.5	2240	4328	0.9	4.2	4.3	167.
12.0	2323	4411	0.4	4.1	4.1	174.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4620

DATE 06/14/77

TIME 07:02MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.19		0.0		1.5	40.
1.0	150	2238	17.00	0.81	1.41	4.34	1.9	183.
1.5	* 228	2316	17.45		-0.53	2.40		
2.0	300	2388	18.73	-0.26	-2.65	0.27	5.6	178.
2.7	412	2500.	18.92	-0.81	-1.07	1.86	7.1	184.
3.3	500	2588.	15.57	-0.35	-1.60	1.33	7.6	185.
6.0	912.	3000.	12.74	-2.83	-1.98	0.94	7.0	192.
12.5	1912.	4000.	3.69	-9.04	-2.80	0.13		
19.0	2912.	5000.	-3.80	-7.49	-1.15	1.78		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4620

DATE 06/14/77

TIME 07:02MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	-1.0	-1.2	1.5	40.
0.5	76.	2164.	-10.6	0.7	0.9	141.
1.0	152.	2240.	0.0	1.9	1.9	185.
1.5	229.	2317.	0.0	4.8	4.8	183.
2.0	305.	2393.	-0.0	5.7	5.7	178.
2.5	381.	2469.	0.0	6.5	6.6	185.
3.0	457.	2545.	0.0	7.9	7.9	184.
3.5	533.	2621.	0.0	7.4	7.4	186.
4.0	610.	2698.	0.0	7.1	7.2	188.
4.5	686.	2774.	1.1	7.1	7.3	190.
5.0	762.	2850.	2.2	7.4	7.7	196.
5.5	838.	2926.	2.2	7.6	7.9	193.
6.0	914.	3002.	1.1	6.8	6.9	192.
6.5	991.	3079.	1.7	6.5	6.8	195.
7.0	1067.	3155.	1.9	7.1	7.3	195.
7.5	1143.	3231.	2.0	6.8	7.1	197.
8.0	1219.	3307.	2.1	7.0	7.2	194.
8.5	1295.	3383.	2.1	7.0	7.3	197.
9.0	1372.	3460.	2.6	6.5	7.0	202.
9.5	1454.	3542.	2.9	6.4	7.0	205.
10.0	1532.	3620.	3.6	6.5	7.4	209.
10.5	1608.	3696.	3.4	5.7	6.7	211.
11.0	1684.	3772.	4.2	7.0	8.1	211.
11.5	1760.	3848.	4.3	7.1	8.3	211.
12.0	1837.	3925.	5.0	7.8	9.3	213.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 0

DATE 06/14/77 TIME 13:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		26.29		0.0		9.3	230.
0.8	150	2238	23.66	-2.63	-4.11	-1.18	9.5	230.
1.5	300	2388	21.97	-1.69	-1.72	-1.21	16.0	228.
2.2	412	2500	20.38	-0.69	-1.38	-2.45	8.4	218.
2.6	500	2588	20.05	-1.23	-1.84	-0.91	7.6	199.
4.4	912	3000	15.83	-4.21	-4.44	-1.51	16.0	198.
8.1	1912	4000	3.69	-11.05	-8.39	-5.46	12.7	216.
10.4	2912	5000	-4.97	-9.73	-9.20	-6.27	12.9	183.
12.5	3912	6000	-15.34	-10.40	-8.26	-5.33	9.5	191.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 0

DATE 06/14/77 TIME 13:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088	7.1	6.0	9.3	230.
0.5	76.	2164	3.5	3.2	4.8	227.
1.0	212.	2300	10.7	8.2	13.5	233.
1.5	308.	2396	12.0	11.0	16.2	228.
2.0	384.	2472	5.1	6.2	8.1	219.
2.5	470.	2558	5.2	7.3	9.0	216.
3.0	598.	2686	1.1	4.4	3.0	143.
3.5	705.	2793	1.9	6.3	6.5	163.
4.0	810.	2898	2.2	11.6	11.8	191.
4.5	929.	3017	2.2	15.7	16.6	199.
5.0	1042.	3130	2.2	18.6	19.6	198.
5.5	1137.	3225	2.2	10.0	10.6	199.
6.0	1237.	3325	2.2	8.0	8.5	199.
6.5	1349.	3437	2.2	8.7	10.2	211.
7.0	1471.	3559	2.2	7.0	7.8	206.
7.5	1652.	3740	2.2	12.3	13.6	205.
8.0	1884.	3972	2.2	9.6	11.7	221.
8.5	2117.	4205	0.0	13.3	13.3	180.
9.0	2321.	4409	0.0	11.9	12.0	185.
9.5	2519.	4607	2.2	12.7	13.2	195.
10.0	2729.	4817	2.2	12.3	12.6	193.
10.5	2966.	5054	2.0	12.9	12.9	180.
11.0	3198.	5286	3.0	14.9	15.4	185.
11.5	3423.	5511	1.1	12.6	12.6	185.
12.0	3677.	5765	1.1	11.6	11.6	187.
12.5	3929.	6017	1.8	9.2	9.4	191.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID

0

DATE 06/16/77 TIME 06:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.00		0.0		0.0	0.
1.0	150	2238	15.30	-0.70	0.59	3.52	1.2	126.
2.0	? 300	2388	15.20	-0.10	-0.20	2.73	0.2	179.
2.7	412.	? 2500.	15.10	-0.10	0.0	2.93	1.6	171.
3.3	? 500	2588	15.10	0.0	-0.20	2.73	2.9	68.
6.0	912.	3000.	13.90	-1.20	-1.77	1.16	1.7	160.
12.4	1912.	4000.	5.00	-8.90	-3.35	-0.42		
18.7	2912.	5000.	-3.40	-8.40	-3.74	-0.81		
24.6	3912.	6000.	-11.20	-7.80	-3.15	-0.22		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID

0

DATE 06/16/77 TIME 06:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	0.0	0.0	0.0	0.
0.5	76.	2164.	-1.9	-0.5	2.0	77.
1.0	152.	2240.	-0.9	-0.7	1.2	127.
1.5	229.	2317.	0.2	0.4	0.4	212.
2.0	305.	2393.	-0.0	0.1	0.1	177.
2.5	381.	2469.	0.4	0.3	0.5	237.
3.0	457.	2545.	-3.0	-0.9	3.1	74.
3.5	533.	2621.	-2.4	-1.2	2.7	63.
4.0	610.	2698.	-3.4	-1.9	3.9	61.
4.5	686.	2774.	-3.9	-2.0	4.4	62.
5.0	762.	2850.	-3.4	-1.0	3.6	74.
5.5	838.	2926.	-1.4	0.7	1.6	118.
6.0	914.	3002.	-0.5	1.6	1.7	162.
6.5	991.	3079.	-0.5	2.0	2.1	167.
7.0	1067.	3155.	-0.5	1.9	1.9	166.
7.5	1143.	3231.	-0.9	3.0	3.1	162.
8.0	1219.	3307.	-0.1	3.9	3.9	179.
8.5	1295.	3383.	2.6	3.6	4.5	215.
9.0	1372.	3460.	3.4	4.5	5.6	217.
9.5	1450.	3538.	5.4	3.2	6.3	239.
10.0	1540.	3628.	4.5	4.1	6.1	228.
10.5	1620.	3708.	4.7	4.2	6.3	229.
11.0	1696.	3784.	5.3	2.8	5.9	242.
11.5	1772.	3860.	5.1	2.8	5.8	242.
12.0	1850.	3938.	5.8	2.4	6.3	247.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID

0

DATE 06/16/77

TIME 13:46MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		25.43		0.0		5.1	220.
0.9	150	2238.	23.36	-2.07	-4.79	-1.86	5.1	222.
1.5	300	2388.	21.83	-1.53	-5.72	-2.80	5.1	208.
2.0	412.	2500.	19.23	-1.50	-6.81	-3.88	5.0	201.
2.3	500.	2588.	19.35	-0.98	-6.81	-3.88	5.0	210.
3.7	912.	3000.	15.10	-3.60	-5.34	-5.42	5.0	196.
6.8	1912.	4000.	4.64	-1.05	-8.18	-5.25	5.0	204.
11.3	2912.	5000.	-2.54	-7.24	-2.29	0.64	4.2	239.
17.9	3912.	6000.	-7.90	-5.36	-4.26	-1.33		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID

0

DATE 06/16/77

TIME 13:46MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	3.3	3.9	5.1	220.
0.5	76.	2216.	3.3	3.3	4.1	223.
1.0	176.	2264.	4.5	3.3	6.9	220.
1.5	289.	2377.	2.6	4.7	5.3	209.
2.0	411.	2499.	1.0	2.7	4.9	201.
2.5	572.	2660.	0.9	4.4	5.7	18.
3.0	741.	2829.	3.4	4.4	5.5	218.
3.5	869.	2957.	1.3	4.6	4.8	196.
4.0	1000.	3088.	1.5	4.5	4.4	196.
4.5	1133.	3219.	2.8	4.8	5.4	200.
5.0	1255.	3340.	4.0	4.2	5.4	232.
5.5	1413.	3503.	4.0	4.0	5.3	233.
6.0	1607.	3695.	4.0	4.0	6.8	218.
6.5	1800.	3888.	0.0	4.0	6.4	198.
7.0	2000.	4097.	0.6	4.0	6.6	197.
7.5	2213.	4301.	1.1	4.0	7.2	203.
8.0	2346.	4434.	3.9	4.3	10.1	211.
8.5	2427.	4515.	5.6	4.4	11.0	216.
9.0	2503.	4591.	5.0	4.0	9.9	222.
9.5	2579.	4667.	5.0	4.0	8.9	235.
10.0	2687.	4775.	6.2	4.9	9.3	222.
10.5	2786.	4874.	7.1	5.0	8.7	235.
11.0	2862.	4950.	7.4	4.0	8.5	240.
11.5	2938.	5026.	8.1	4.0	9.5	238.
12.0	3014.	5102.	9.3	4.0	10.8	240.
12.5	3091.	5179.	9.9	4.0	12.4	233.
13.0	3167.	5255.	11.8	0.0	14.9	233.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4597

DATE 06/17/77

TIME 07:00MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.37		0.0		0.0	0.
1.0	150.	2238.	16.90	0.54	0.18	3.10	0.8	351.
2.0	300.	2388.	17.52	0.62	2.29	5.22	0.4	6.
2.7	412.	2500.	17.36	0.20	-1.94	0.99	1.1	140.
3.3	500.	2588.	17.01	-0.71	-1.41	1.51	1.4	143.
6.0	912.	3000.	15.56	-1.45	-1.78	1.15	2.8	209.
12.5	1912.	4000.	8.67	-6.88	-2.57	0.36		
19.1	2912.	5000.	1.98	-6.69	-1.69	1.24		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4597

DATE 06/17/77

TIME 07:00MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	0.0	0.0	0.0	0.
0.5	76.	2164.	-1.1	0.0	0.8	102.
1.0	152.	2240.	0.0	0.0	1.1	59.
1.5	229.	2317.	0.0	0.7	0.7	1.
2.0	305.	2393.	0.0	0.3	0.3	6.
2.5	381.	2469.	0.0	0.7	1.2	157.
3.0	457.	2545.	0.4	0.0	1.1	59.
3.5	533.	2621.	1.3	1.1	1.7	131.
4.0	610.	2698.	1.4	1.6	2.1	139.
4.5	686.	2774.	1.6	2.0	3.0	149.
5.0	762.	2850.	1.1	2.4	3.9	152.
5.5	838.	2926.	0.0	2.4	3.3	179.
6.0	914.	3002.	1.4	2.4	2.8	10.
6.5	991.	3079.	2.0	2.5	3.9	30.
7.0	1067.	3155.	2.7	3.6	4.3	20.
7.5	1143.	3231.	3.8	4.1	5.6	17.
8.0	1219.	3307.	3.3	4.1	5.3	19.
8.5	1295.	3383.	3.7	4.5	5.8	20.
9.0	1372.	3460.	4.3	4.8	6.5	22.
9.5	1448.	3536.	5.3	4.8	7.1	28.
10.0	1524.	3612.	6.1	4.4	7.5	34.
10.5	1600.	3688.	5.8	3.7	6.8	38.
11.0	1676.	3764.	5.2	3.1	6.1	39.
11.5	1754.	3842.	5.3	3.2	6.2	39.
12.0	1830.	3918.	5.8	3.8	6.9	37.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4902

DATE 06/17/77 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		27.31		0.0		6.2	210.
0.7	150	2238	23.92	-3.38	-3.92	-0.99	13.3	190.
1.3	300	2388	23.03	-0.90	-1.54	1.39	18.9	189.
2.0	412.	2500.	22.84	-0.19	-0.51	2.41	20.5	181.
2.6	500	2588.	22.33	-0.50	-1.55	1.38	20.4	178.
5.2	912.	3000.	19.32	-2.48	-2.09	0.84	5.0	178.
11.8	1912.	4000.	14.83	-5.02	-2.86	0.07	M	M
16.1	2912.	5000.	4.65	-10.18	-6.14	-3.21		
20.8	3912.	6000.	-4.38	-9.03	-4.22	-1.29		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4902

DATE 06/17/77 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	3.1	5.4	6.2	210.
0.5	76.	2164.	0.6	6.1	6.2	186.
1.0	248.	2336.	6.4	21.9	22.8	196.
1.5	336.	2424.	1.2	16.2	16.2	184.
2.0	412.	2500.	0.4	20.5	20.5	181.
2.5	488.	2576.	-1.2	20.4	20.4	177.
3.0	565.	2653.	1.6	20.3	20.3	184.
3.5	641.	2729.	-1.2	3.3	3.6	160.
4.0	717.	2805.	0.2	9.3	9.3	182.
4.5	793.	2881.	-2.0	2.3	3.0	139.
5.0	875.	2963.	-0.9	2.4	2.6	159.
5.5	951.	3039.	2.3	7.2	7.6	198.
6.0	1027.	3115.	-0.7	14.0	14.1	177.
6.5	1103.	3191.	-1.1	10.8	10.8	174.
7.0	1179.	3267.	-0.4	12.0	12.0	178.
7.5	1256.	3344.	1.2	13.6	13.6	185.
8.0	1332.	3420.	2.6	16.8	17.0	189.
8.5	1408.	3496.	5.7	16.6	17.6	199.
9.0	1484.	3572.	4.4	21.2	21.7	192.
9.5	1560.	3648.	2.1	20.0	20.1	186.
10.0	1637.	3725.	8.2	14.7	16.8	209.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4598

DATE 06/20/77

TIME 07:00MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WB M/S	WD DEG
	SFC		18.79		0.0		3.1	220.
1.0	150.	2238.	17.81	-0.97	-2.29	0.64	7.3	199.
2.0	300.	2388.	16.82	-0.99	-1.41	1.51	9.2	195.
2.7	412.	2500.	15.74	-0.89	-2.84	0.09	10.1	195.
3.3	500.	2588.	15.12	-0.81	-3.03	-0.10	10.6	195.
6.0	912.	3000.	11.91	-3.21	-2.53	0.39	7.3	199.
12.3	1912.	4000.	2.75	-9.16	-2.61	0.12		
18.8	2912.	5000.	-4.77	-7.51	-3.07	-0.14		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4598

DATE 06/20/77

TIME 07:00MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	2.0	2.4	3.1	220.
0.5	76.	2164.	1.1	3.2	3.4	199.
1.0	152.	2240.	1.4	7.0	7.4	199.
1.5	229.	2317.	2.2	7.6	7.9	197.
2.0	305.	2393.	2.4	8.9	9.3	195.
2.5	381.	2469.	2.4	9.5	9.8	194.
3.0	457.	2545.	2.7	10.2	10.6	195.
3.5	533.	2621.	2.6	10.2	10.6	194.
4.0	610.	2698.	2.4	9.0	9.3	195.
4.5	686.	2774.	2.4	8.7	9.0	196.
5.0	762.	2850.	2.6	8.8	9.1	197.
5.5	842.	2930.	2.6	7.3	7.8	199.
6.0	918.	3006.	2.3	6.9	7.2	199.
6.5	994.	3082.	2.2	8.1	8.4	195.
7.0	1070.	3158.	3.3	7.0	7.8	205.
7.5	1146.	3234.	3.3	7.0	7.6	202.
8.0	1224.	3312.	2.6	8.0	8.5	200.
8.5	1300.	3388.	2.4	7.0	7.4	199.
9.0	1391.	3479.	2.7	9.5	9.9	196.
9.5	1476.	3564.	2.2	9.0	9.3	194.
10.0	1552.	3640.	1.0	6.2	6.6	189.
10.5	1633.	3721.	1.0	5.8	6.2	186.
11.0	1709.	3797.	0.7	8.3	8.4	183.
11.5	1785.	3873.	0.4	8.8	8.6	177.
12.0	1861.	3949.	0.0	9.8	9.8	180.

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4602
 DATE 06/20/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		22.84		0.0		8.2	220.
0.8	150.	2238.	19.99	-2.85	-2.61	0.32	15.2	204.
1.6	300.	22388.	19.32	-0.67	0.0	2.93	28.4	205.
2.4	450.	22500.	19.32	0.0	0.35	2.58	35.5	206.
3.2	600.	22588.	19.14	-0.17	0.70	2.23	41.5	206.
4.0	750.	30000.	18.25	-0.89	1.06	1.87	25.8	213.
4.8	900.	30000.	18.25	-0.89	1.06	1.87	25.8	213.
5.6	1050.	40000.	10.72	-7.53	2.28	0.35	0.35	
6.4	1200.	50000.	0.46	-10.26	3.53	1.60		
7.2	1350.	60000.	-8.39	-8.85	4.90	0.02		

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4602
 DATE 06/20/77 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	5.3	6.3	8.2	220.
0.8	76.	2164.	1.6	6.2	6.1	195.
1.6	200.	2294.	1.1	6.9	6.0	190.
2.4	350.	2370.	1.0	6.3	5.6	190.
3.2	500.	2446.	1.3	5.9	5.1	190.
4.0	650.	2523.	1.4	5.6	4.7	190.
4.8	800.	2599.	1.8	5.8	4.4	190.
5.6	950.	2675.	1.4	5.4	4.0	190.
6.4	1100.	2751.	1.7	5.0	3.8	190.
7.2	1250.	2827.	2.0	4.5	3.4	190.
8.0	1400.	2904.	1.7	4.7	3.5	190.
8.8	1550.	2980.	1.6	4.1	3.0	190.
9.6	1700.	3056.	8.5	1.1	2.8	190.
10.4	1850.	3132.	8.1	1.2	2.8	190.
11.2	2000.	3208.	2.2	0.0	2.2	190.
12.0	2150.	3284.	2.7	0.0	2.0	190.
12.8	2300.	3361.	2.2	0.0	1.4	190.
13.6	2450.	3437.	2.2	0.0	1.0	190.
14.4	2600.	3513.	3.0	0.0	0.0	190.
15.2	2750.	3589.	3.3	0.0	0.0	190.
16.0	2900.	3665.	3.5	0.0	0.0	190.
16.8	3050.	3742.	4.5	0.0	0.0	190.
17.6	3200.	3821.	1.1	0.0	0.0	190.
18.4	3350.	3905.	0.0	0.0	0.0	190.
19.2	3500.	3988.	0.8	0.0	0.0	190.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4011

DATE 06/22/77 TIME 07:34MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		18.43		0.0		0.0	0.
0.7	150	2238	13.79	-4.64	-3.06	-0.13	1.6	7.
1.1	300	2388	12.40	-1.39	-0.36	2.57	2.7	14.
1.8	412.	2500.	12.55	0.17	-0.18	2.75	2.6	26.
2.4	500	2588.	12.28	-0.29	-0.90	2.03	2.5	38.
5.1	912.	3000.	10.99	-1.19	-1.09	1.84	3.0	64.
11.7	1912.	4000.	6.05	-4.94	-1.85	1.08	4.3	148.
18.0	2912.	5000.	-2.05	-8.20	-3.42	-0.49		
24.2	3912.	6000.	-10.07	-8.02	-3.11	-0.19		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4011

DATE 06/22/77 TIME 07:34MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	0.0	0.0	0.0	0.
0.5	76.	2164.	-0.1	-0.9	0.9	5.
1.0	287.	2375.	-0.5	-2.7	2.7	10.
1.5	364.	2452.	-1.1	-1.9	2.2	31.
2.0	440.	2528.	-1.1	-2.6	2.8	23.
2.5	517.	2605.	-1.6	-1.8	2.4	42.
3.0	593.	2681.	-3.5	-2.2	4.1	58.
3.5	669.	2757.	-4.1	-2.1	4.6	63.
4.0	745.	2833.	-4.1	-1.2	4.3	74.
4.5	821.	2909.	-3.3	-1.3	3.6	69.
5.0	898.	2986.	-2.7	-1.4	3.0	64.
5.5	974.	3062.	-2.7	-1.2	3.0	67.
6.0	1050.	3138.	-3.1	-1.4	3.4	66.
6.5	1126.	3214.	-4.0	0.3	4.1	94.
7.0	1202.	3290.	-3.4	0.1	3.4	91.
7.5	1279.	3367.	-3.1	0.0	3.1	91.
8.0	1355.	3443.	-3.1	0.4	3.1	97.
8.5	1431.	3519.	-2.6	1.6	3.1	122.
9.0	1507.	3595.	-1.7	2.8	3.3	149.
9.5	1583.	3671.	-0.9	3.8	3.9	166.
10.0	1660.	3748.	-1.2	3.5	3.7	160.
10.5	1736.	3824.	-1.1	3.0	3.2	160.
11.0	1812.	3900.	-1.8	3.3	3.7	151.
11.5	1888.	3976.	-2.1	3.5	4.1	148.
12.0	1964.	4052.	-2.6	4.0	4.8	147.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4608

DATE 06/22/77 TIME 12:57MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.79		0.0		4.1	270.
0.8	150.	2238.	19.11	-2.68	-2.79	0.13	6.1	269.
1.7	300.	2388.	18.25	-0.85	-3.34	-0.42	5.0	284.
2.4	412.	2500.	16.91	-1.33	-3.54	-0.61	4.7	277.
2.9	500.	2588.	15.93	-0.99	-3.19	-0.27	5.5	270.
3.2	912.	3000.	11.36	-4.53	-6.89	-3.97	5.5	235.
7.9	1912.	4000.	1.02	-10.34	-7.14	-4.21	6.6	319.
12.0	2912.	5000.	-7.90	-8.96	-2.90	0.03	M	M
18.0	3912.	6000.	-16.34	-8.44	-8.51	-5.58		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4608

DATE 06/22/77 TIME 12:57MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	4.1	0.0	4.1	270.
0.5	76.	2164.	3.3	0.7	3.3	258.
1.0	189.	2277.	7.6	0.5	7.6	274.
1.5	265.	2353.	6.5	0.6	6.7	284.
2.0	341.	2429.	4.8	0.3	5.0	285.
2.5	429.	2517.	4.6	0.4	4.6	275.
3.0	514.	2602.	5.7	0.1	5.7	269.
3.5	593.	2681.	5.9	0.5	5.9	265.
4.0	670.	2758.	5.0	0.1	5.0	269.
4.5	749.	2837.	4.5	0.4	4.5	265.
5.0	849.	2937.	4.0	0.8	4.4	246.
5.5	982.	3070.	1.7	1.8	2.0	224.
6.0	1153.	3241.	2.7	1.2	2.9	247.
6.5	1343.	3431.	4.8	0.6	5.0	251.
7.0	1540.	3628.	1.3	0.5	1.4	248.
7.5	1750.	3838.	3.1	1.1	3.1	211.
8.0	1959.	4047.	1.2	0.7	1.6	200.
8.5	2129.	4217.	0.1	1.3	1.3	185.
9.0	2288.	4376.	2.3	1.0	2.1	147.
9.5	2440.	4528.	0.5	2.0	2.1	195.
10.0	2547.	4635.	0.4	1.9	1.9	195.
10.5	2641.	4729.	0.0	1.3	1.3	181.
11.0	2737.	4825.	0.0	2.2	2.2	180.
11.5	2832.	4920.	0.1	3.1	3.1	178.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4908

DATE 06/24/77

TIME 06:49MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		15.74		0.0		0.0	0.
1.0	150.	2238.	15.74	0.00	-1.78	1.15	2.7	101.
2.0	300.	2388.	15.11	-0.63	0.53	3.46	3.5	120.
2.7	412.	2500.	15.38	0.18	-1.25	1.68	4.8	123.
3.3	500.	2588.	14.68	-0.60	-1.61	1.32	4.9	128.
6.0	912.	3000.	12.83	-1.86	-1.60	1.13	1.4	110.
12.5	1912.	4000.	5.87	-5.66	-3.71	-0.78	5.0	353.
18.6	2912.	5000.	-2.82	-9.99	-3.24	-0.31		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4908

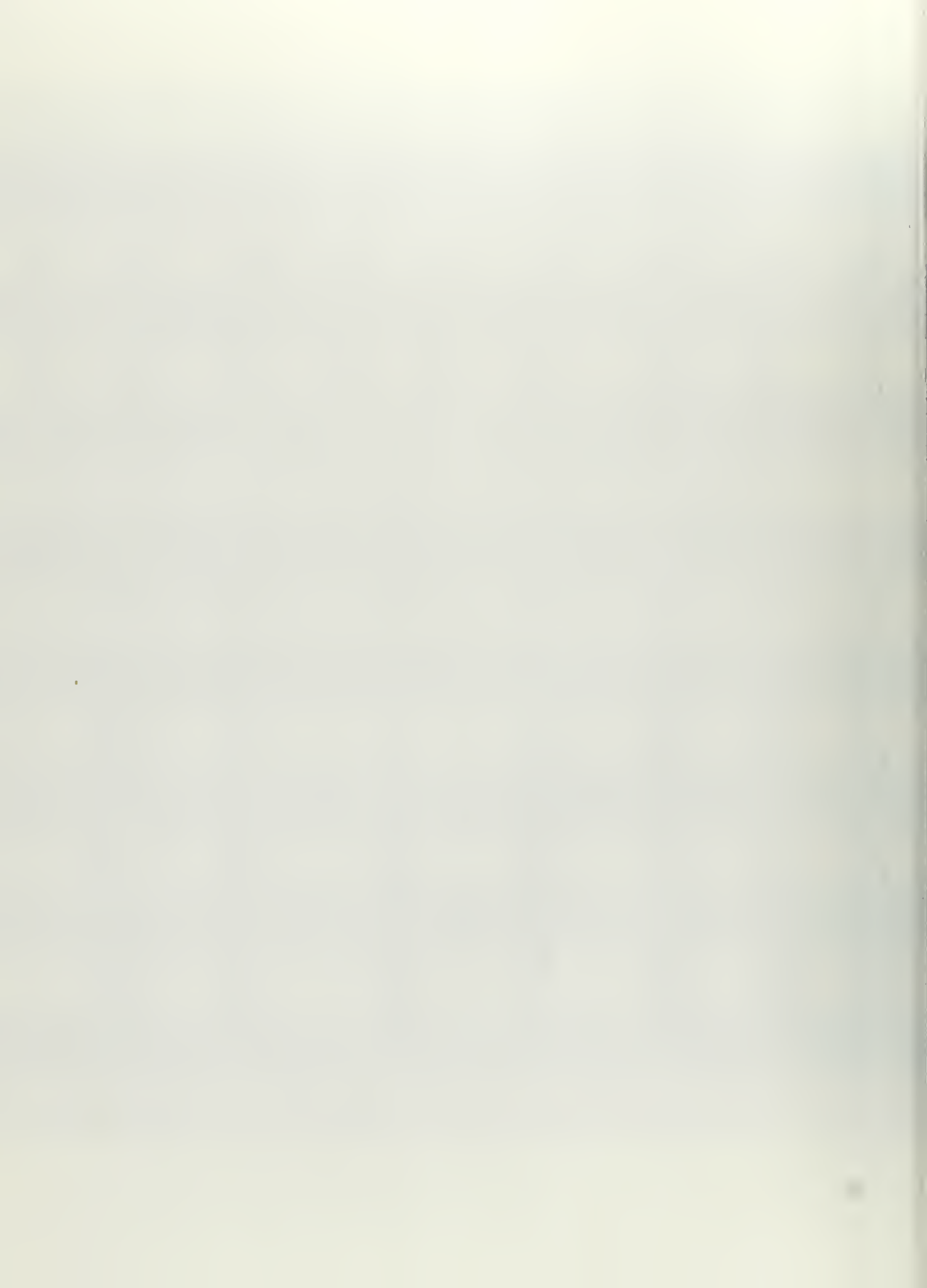
DATE 06/24/77

TIME 06:49MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	0.0	0.0	0.0	0.
0.5	76.	2164.	0.3	0.6	2.5	70.
1.0	152.	2240.	0.6	0.6	2.5	102.
1.5	229.	2317.	1.1	1.4	2.5	120.
2.0	305.	2393.	1.1	1.1	3.5	120.
2.5	381.	2469.	1.3	1.4	4.5	123.
3.0	457.	2545.	1.4	1.7	4.5	123.
3.5	533.	2621.	1.4	1.4	4.7	133.
4.0	610.	2698.	1.3	1.5	3.8	132.
4.5	686.	2774.	0.9	0.2	1.5	141.
5.0	762.	2850.	0.3	0.4	0.8	103.
5.5	838.	2926.	0.0	0.7	0.8	107.
6.0	914.	3002.	1.3	1.4	2.4	93.
6.5	991.	3079.	1.2	1.0	2.0	66.
7.0	1067.	3155.	1.2	0.0	2.0	39.
7.5	1143.	3231.	1.2	1.5	2.4	25.
8.0	1219.	3307.	1.1	1.5	4.4	13.
8.5	1295.	3383.	1.1	1.4	4.7	33.
9.0	1372.	3460.	0.0	1.4	4.4	33.
9.5	1448.	3536.	1.1	1.4	4.0	33.
10.0	1524.	3612.	1.1	1.5	4.0	33.
10.5	1600.	3688.	2.3	1.5	5.0	33.
11.0	1676.	3764.	2.6	1.4	5.5	33.
11.5	1756.	3844.	1.1	1.1	5.2	340.
12.0	1833.	3921.	0.2	0.5	2.2	347.
12.5	1909.	3997.	0.6	0.0	5.0	353.
13.0	1992.	4080.	0.2	0.1	6.1	358.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4906

DATE 06/24/77

TIME 13:04MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
0.8	SFC		27.56		0.0		7.2	180.
1.6	150.	2238.	24.03	-3.54	-2.73	0.20	12.8	338.
2.4	300.	2388.	22.62	-1.41	-5.87	-2.94	5.1	343.
3.2	450.	2500.	20.03	-1.59	-6.78	-3.85	7.5	340.
4.0	600.	2588.	20.11	-0.92	-6.78	-3.85	7.1	330.
4.8	750.	3000.	14.38	-4.47	-8.95	-6.02	4.8	350.
5.6	900.	4000.	5.58	-10.02	-8.16	-5.23	7.5	339.
6.4	1050.	5000.	-4.19	-8.84	-4.78	-1.86	4.5	20.
7.2	1200.	5000.	-12.04	-8.83	-3.90	-0.98		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4906

DATE 06/24/77

TIME 13:04MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	-0.0	7.2	7.2	180.
1.0	76.	2164.	4.9	11.2	12.3	336.
2.0	213.	2301.	4.8	12.4	13.3	339.
3.0	359.	2377.	1.4	14.6	14.8	343.
4.0	506.	2484.	2.3	15.0	16.3	342.
5.0	652.	2640.	1.1	15.6	16.9	324.
6.0	797.	2815.	0.2	15.5	16.4	330.
7.0	940.	2998.	0.8	14.7	14.7	350.
8.0	1085.	3203.	1.9	11.7	11.0	344.
9.0	1230.	3431.	2.5	11.1	11.3	347.
10.0	1373.	3661.	3.1	10.8	10.5	336.
11.0	1515.	3883.	3.6	10.7	10.5	340.
12.0	1657.	4083.	1.1	10.6	10.5	350.
13.0	1800.	4310.	1.1	10.6	10.5	350.
14.0	1943.	4510.	1.0	10.6	10.5	350.
15.0	2088.	4710.	1.0	10.6	10.5	350.
16.0	2232.	4850.	1.1	10.6	10.5	350.
17.0	2377.	4942.	1.1	10.6	10.5	350.
18.0	2520.	5068.	1.1	10.6	10.5	350.
19.0	2665.	5199.	1.1	10.6	10.5	350.
20.0	2810.	5249.	1.1	10.6	10.5	350.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4904

DATE 06/27/77 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		22.84		0.0		0.0	0.
0.8	150	2238	20.23	-2.61	2.96	-0.03	1.5	36.
1.6	300	2388	18.64	-1.58	3.16	-0.23	0.7	63.
2.3	412	2500	17.54	-1.07	2.29	0.64	0.6	299.
2.9	500	2588	17.09	-0.49	2.12	-0.81	0.6	291.
3.6	612	3000	14.20	-2.53	2.04	-0.12	0.9	285.
4.0	612	4000	6.15	-8.42	2.41	0.52		
4.5	2912	5000	-1.86	-8.01	3.61	-0.68		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4904

DATE 06/27/77 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0	2088	0.0	0.0	0.0	0.
0.5	76	2164	0.8	0.9	1.3	42.
1.0	206	2240	0.9	1.4	1.7	31.
1.5	284	2316	0.0	0.6	0.6	3.
2.0	360	2392	0.7	0.4	0.8	296.
2.5	438	2468	0.8	0.0	0.0	300.
3.0	517	2544	0.0	0.7	1.1	289.
3.5	593	2620	0.5	1.1	1.9	212.
4.0	669	2696	0.8	1.4	2.2	243.
4.5	745	2772	0.9	1.4	3.3	257.
5.0	822	2848	0.0	1.0	6.0	273.
5.5	898	2924	0.9	1.3	6.0	283.
6.0	974	3000	2.7	1.1	6.6	292.
6.5	1051	3076	4.1	1.4	5.2	297.
7.0	1128	3152	1.1	1.4	4.2	315.
7.5	1204	3228	0.6	0.6	4.4	324.
8.0	1280	3304	0.6	0.5	4.4	324.
8.5	1356	3380	0.0	0.0	4.4	324.
9.0	1432	3456	1.0	0.0	4.4	325.
9.5	1509	3532	1.8	0.9	4.4	325.
10.0	1585	3608	3.1	0.0	4.4	325.
10.5	1661	3684	3.4	0.0	4.4	325.
11.0	1738	3760	3.7	0.0	4.4	325.
11.5	1814	3836	3.9	0.0	4.4	325.
12.0	1890	3912	4.0	0.0	4.4	325.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4907

DATE 06/27/77

TIME 13:01MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		27.14		0.0		5.1	320.
0.9	150.	2238.	24.68	-2.46	2.21	0.72	6.1	294.
1.8	300.	2388.	23.14	-1.55	2.39	0.53	6.3	284.
2.7	450.	2538.	22.14	-0.72	2.76	0.17	6.9	277.
3.6	600.	2588.	21.80	-0.62	2.59	0.34	5.8	274.
4.5	750.	3000.	17.71	-3.55	2.46	0.47	5.7	267.
5.4	900.	4000.	10.25	-7.72	1.46	1.47	7.8	232.
6.3	1050.	5000.	3.41	-7.12	2.43	0.50		
7.2	1200.	6000.	-6.42	-9.83	4.04	-1.11		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4907

DATE 06/27/77

TIME 13:01MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	3.3	1.9	5.1	320.
0.5	76.	2164.	3.8	2.6	4.6	304.
1.0	152.	2240.	6.3	2.3	6.7	290.
1.5	228.	2316.	7.2	1.6	7.4	282.
2.0	304.	2392.	5.3	1.5	5.5	285.
2.5	380.	2468.	4.8	0.6	4.8	277.
3.0	456.	2544.	5.3	0.6	5.4	274.
3.5	532.	2620.	7.3	0.6	7.3	274.
4.0	608.	2696.	7.1	0.3	7.1	272.
4.5	684.	2772.	5.0	0.7	5.0	279.
5.0	760.	2848.	5.1	0.0	5.2	278.
5.5	836.	2924.	5.6	0.0	5.7	254.
6.0	912.	3000.	3.5	0.0	3.6	283.
6.5	988.	3076.	4.6	0.0	4.6	272.
7.0	1064.	3152.	3.9	0.0	4.0	281.
7.5	1140.	3228.	5.5	0.0	5.5	268.
8.0	1216.	3304.	4.7	0.0	4.8	269.
8.5	1292.	3380.	5.1	0.0	5.1	263.
9.0	1368.	3456.	6.6	0.0	6.6	273.
9.5	1444.	3532.	7.3	0.0	7.3	271.
10.0	1520.	3608.	6.3	0.0	6.3	254.
10.5	1596.	3684.	7.5	0.0	7.5	258.
11.0	1672.	3760.	7.6	0.0	7.8	256.
11.5	1748.	3836.	5.4	0.0	5.4	268.
12.0	1824.	3912.	6.1	0.0	7.8	231.
12.5	1900.	3988.	7.3	1.4	7.4	259.



COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4905

DATE 06/28/77

TIME 06:44MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.46		0.0		0.0	0.
1.0	150	2238	15.65	-0.81	-0.18	2.75	1.2	224.
2.0	300	2388	15.47	-0.18	-0.36	2.57	1.8	26.
2.7	412.	2500.	15.38	-0.09	-0.71	2.22	2.7	27.
3.3	500.	2588.	15.02	-0.35	-1.1	1.68	3.8	25.
6.0	912.	3000.	12.37	-2.65	-1.1	1.67	3.8	338.
12.5	1912.	4000.	4.83	-7.54	-2.42	0.51	7.5	300.
19.1	2912.	5000.	-1.19	-6.01	-0.19	2.74		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4905

DATE 06/28/77

TIME 06:44MST

ASCENT RATE 500 FPM

DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	0.0	0.0	0.0	0.
0.5	76.	2164.	0.0	0.0	0.0	141.
1.0	152.	2240.	0.0	0.0	0.0	226.
1.5	228.	2317.	0.0	0.0	0.0	301.
2.0	304.	2393.	0.0	0.0	0.0	301.
2.5	380.	2469.	0.0	0.0	0.0	226.
3.0	456.	2545.	0.0	0.0	0.0	226.
3.5	532.	2621.	0.0	0.0	0.0	226.
4.0	608.	2697.	0.0	0.0	0.0	226.
4.5	684.	2773.	0.0	0.0	0.0	226.
5.0	760.	2849.	0.0	0.0	0.0	226.
5.5	836.	2925.	0.0	0.0	0.0	226.
6.0	912.	3001.	0.0	0.0	0.0	226.
6.5	988.	3077.	0.0	0.0	0.0	226.
7.0	1064.	3153.	0.0	0.0	0.0	226.
7.5	1140.	3229.	0.0	0.0	0.0	226.
8.0	1216.	3305.	0.0	0.0	0.0	226.
8.5	1292.	3381.	0.0	0.0	0.0	226.
9.0	1368.	3457.	0.0	0.0	0.0	226.
9.5	1444.	3533.	0.0	0.0	0.0	226.
10.0	1520.	3609.	0.0	0.0	0.0	226.
10.5	1596.	3685.	0.0	0.0	0.0	226.
11.0	1672.	3761.	0.0	0.0	0.0	226.
11.5	1748.	3837.	0.0	0.0	0.0	226.
12.0	1824.	3913.	0.0	0.0	0.0	226.
12.5	1900.	3989.	0.0	0.0	0.0	226.
13.0	1976.	4065.	0.0	0.0	0.0	226.
13.5	2052.	4141.	0.0	0.0	0.0	226.

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4903

DATE 06/28/77 TIME 13:09MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		25.00		0.0		3.1	300.
0.9	150	2238	22.86	-2.14	-0.85	2.07	2.8	293.
1.9	300	2388	23.18	0.31	0.68	3.61	10.7	302.
2.6	412	2500	23.71	0.35	0.17	2.76	11.0	302.
3.5	500	2588	23.54	0.01	1.71	1.22	10.6	307.
4.5	912	3000	20.03	-3.50	1.39	1.53	4.8	219.
11.1	1912	74000	11.46	-8.58	4.18	1.25	4.3	224.
15.8	2912	5000	11.41	-10.05	0.75	2.18		
21.6	3912	6000	-5.35	-6.76	2.50	0.43		

COL CB TRACT

ELEV 2088 METERS

SOUNDING ID 4903

DATE 06/28/77 TIME 13:09MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2088.	2.7	1.5	3.1	300.
0.5	76.	2164.	2.8	0.0	3.8	271.
1.0	168.	2256.	3.0	0.0	3.4	298.
1.5	245.	2333.	3.4	0.0	3.0	297.
2.0	321.	2409.	3.3	0.0	3.5	305.
2.5	397.	2485.	3.7	0.0	3.2	302.
3.0	473.	2561.	3.9	0.0	3.1	303.
3.5	549.	2637.	4.2	0.0	3.1	299.
4.0	626.	2714.	4.2	0.0	3.3	232.
4.5	702.	2790.	4.5	0.0	3.4	241.
5.0	788.	2876.	4.5	0.0	3.8	227.
5.5	907.	2995.	4.9	0.0	4.4	218.
6.0	987.	3075.	4.1	0.0	4.9	216.
6.5	1063.	3151.	0.0	0.0	4.2	217.
7.0	1139.	3227.	0.0	0.0	4.0	217.
7.5	1215.	3303.	1.6	0.0	4.0	217.
8.0	1291.	3379.	2.3	0.0	4.0	217.
8.5	1368.	3456.	2.3	0.0	4.0	217.
9.0	1444.	3532.	1.0	1.7	4.0	209.
9.5	1541.	3629.	0.4	1.3	4.4	193.
10.0	1663.	3751.	0.8	2.2	5.3	194.
10.5	1784.	3872.	0.0	2.2	5.9	232.
11.0	1889.	3977.	2.8	2.2	5.9	225.
11.5	1992.	4080.	4.4	2.2	5.4	219.
12.0	2101.	4189.	5.6	4.7	6.0	218.
12.5	2214.	4302.	5.1	6.3	6.1	219.

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4901
 DATE 06/30/77 TIME 07:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		19.58		0.0		0.0	0.
0.9	150.	2238.	17.46	-2.13	-1.23	1.70	0.5	278.
1.9	300.	2388.	17.52	0.07	-0.88	2.05	0.5	293.
2.9	450.	2538.	16.46	-1.04	-1.95	0.98	0.5	336.
3.9	600.	2588.	16.02	-0.46	-1.95	0.97	0.2	242.
4.9	750.	3000.	13.74	-2.27	-2.51	0.41	2.5	254.
5.9	900.	4000.	6.71	-7.04	-1.66	1.27		
6.9	1050.	5000.	-1.08	-7.80	0.0	2.93		
7.9	1200.	6000.	-7.80	-6.72	-2.51	0.41		

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4901
 DATE 06/30/77 TIME 07:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

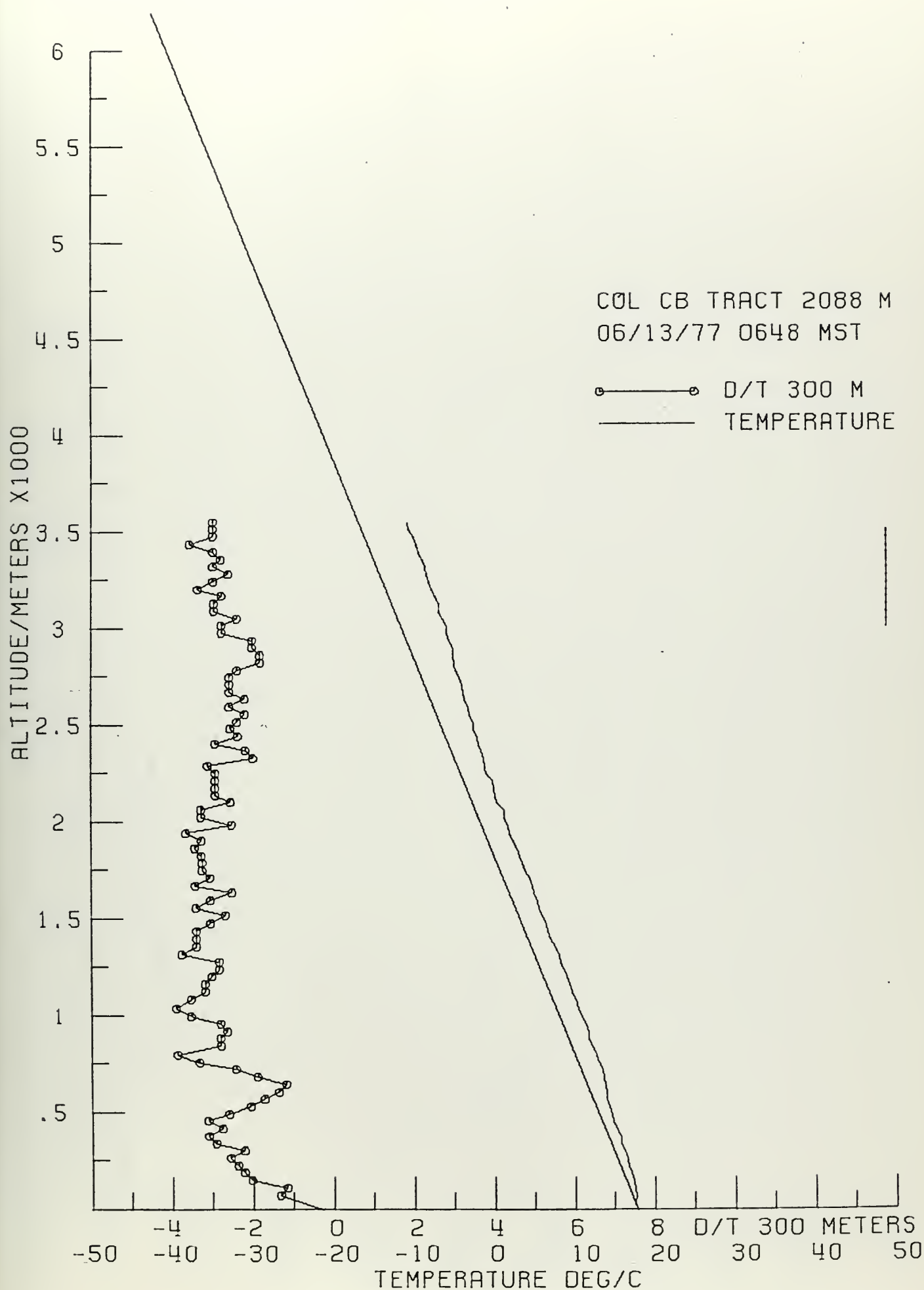
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	0.0	0.0	0.0	0.
0.5	76.	2164.	0.0	0.0	1.0	342.
1.0	152.	2240.	0.0	0.0	1.6	343.
1.5	228.	2316.	0.0	0.0	1.8	343.
2.0	304.	2392.	0.0	0.0	0.5	334.
2.5	380.	2468.	0.0	0.0	0.4	334.
3.0	456.	2544.	0.0	0.0	0.1	347.
3.5	532.	2620.	0.0	0.0	0.4	355.
4.0	608.	2696.	0.0	0.0	0.5	361.
4.5	684.	2772.	0.0	0.0	0.4	362.
5.0	760.	2848.	0.0	0.0	0.0	362.
5.5	836.	2924.	0.0	0.0	0.2	360.
6.0	912.	3000.	0.0	0.0	0.6	360.
6.5	988.	3076.	0.0	0.0	0.8	360.
7.0	1064.	3152.	0.0	0.0	0.3	360.
7.5	1140.	3228.	0.0	0.0	0.2	360.
8.0	1216.	3304.	0.0	0.0	0.2	360.
8.5	1292.	3380.	0.0	0.0	0.2	360.
9.0	1368.	3456.	0.0	0.0	0.2	360.
9.5	1444.	3532.	0.0	0.0	0.9	360.
10.0	1520.	3608.	0.0	0.0	0.0	360.
10.5	1596.	3684.	0.0	0.0	0.3	360.
11.0	1672.	3760.	0.0	0.0	0.0	360.
11.5	1748.	3836.	0.0	0.0	0.7	360.
12.0	1824.	3912.	0.0	0.0	0.0	360.

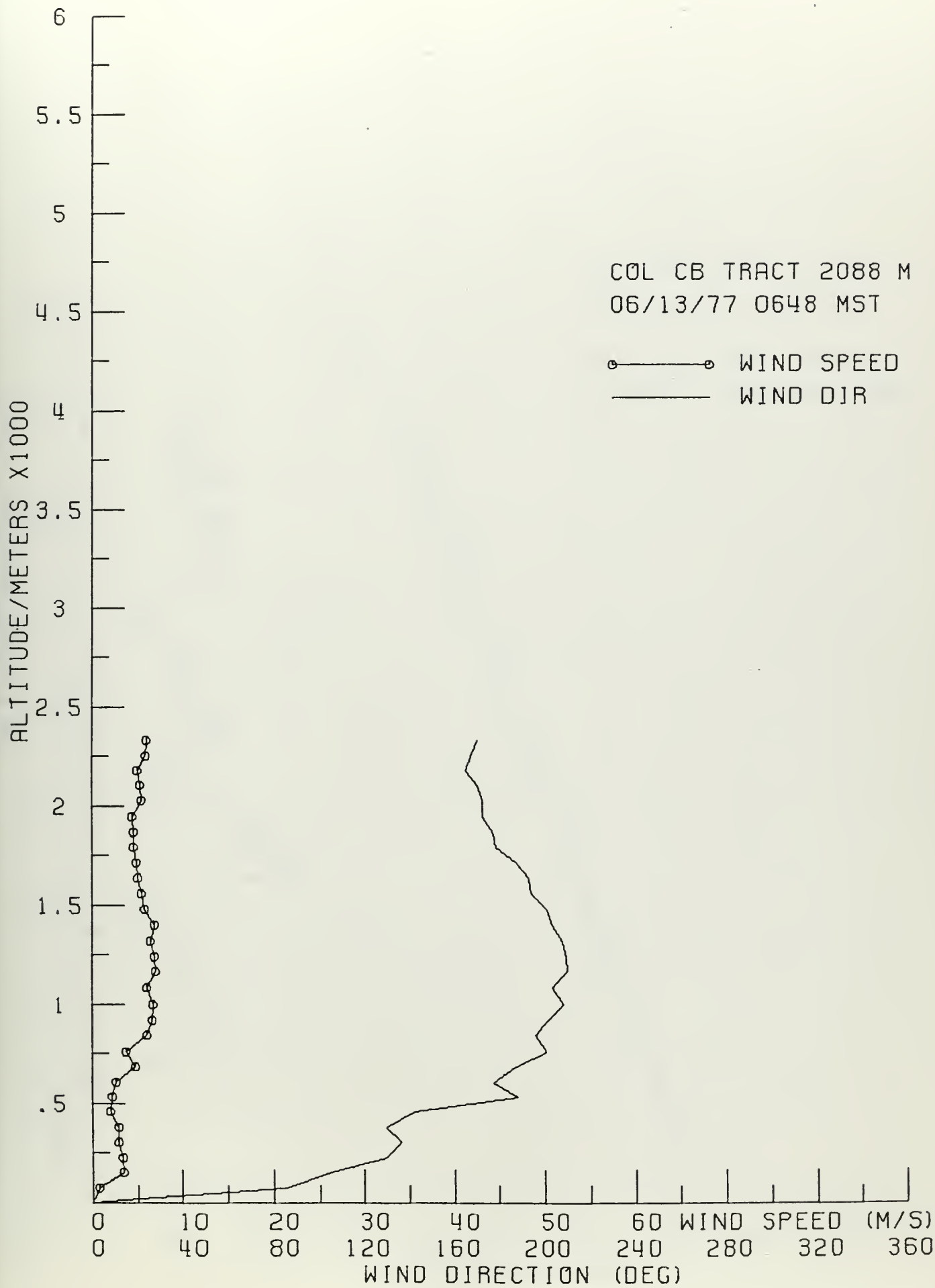
COL CB TRACT ELEV 2088 METERS SOUNDING ID 4899
 DATE 06/30/77 TIME 12:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

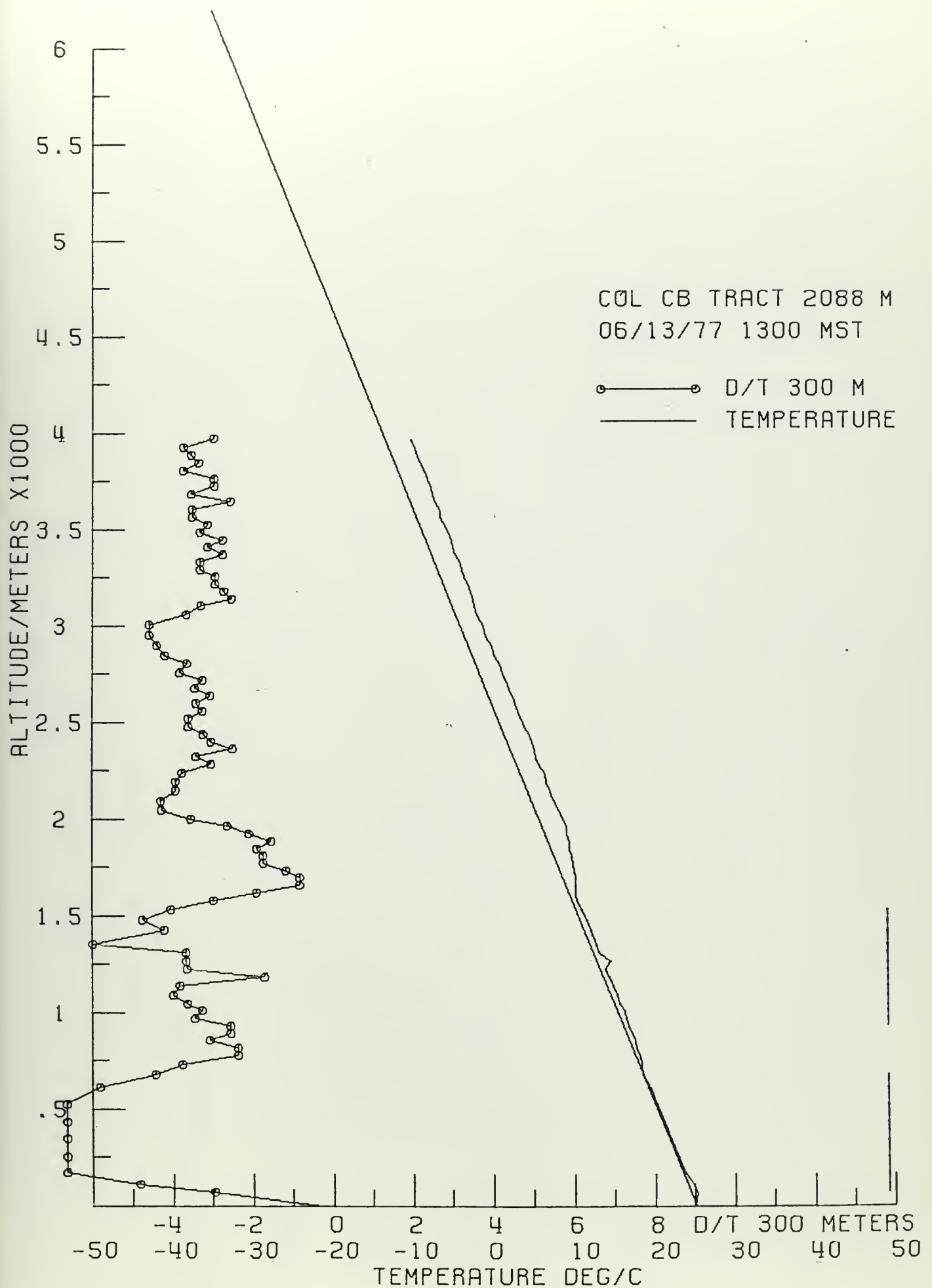
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		23.71		0.0		2.1	320.
0.8	150.	2238.	20.08	-3.62	-2.44	0.49	4.0	321.
1.5	300.	2388.	18.74	-1.34	-1.75	1.18	3.9	317.
2.3	412.	2500.	18.25	-0.49	-1.23	1.70	5.2	316.
3.0	500.	2588.	17.82	-0.43	-1.76	1.17	5.6	321.
3.8	912.	3000.	14.83	-2.24	-3.00	2.07	5.3	301.
4.5	1912.	4000.	5.21	-9.99	-3.34	0.41	4.0	283.
14.3	2912.	5000.	-4.18	-9.77	-2.10	0.83		
20.6	3912.	6000.	-11.06	-6.88	-2.73	0.20		

COL CB TRACT ELEV 2088 METERS SOUNDING ID 4899
 DATE 06/30/77 TIME 12:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

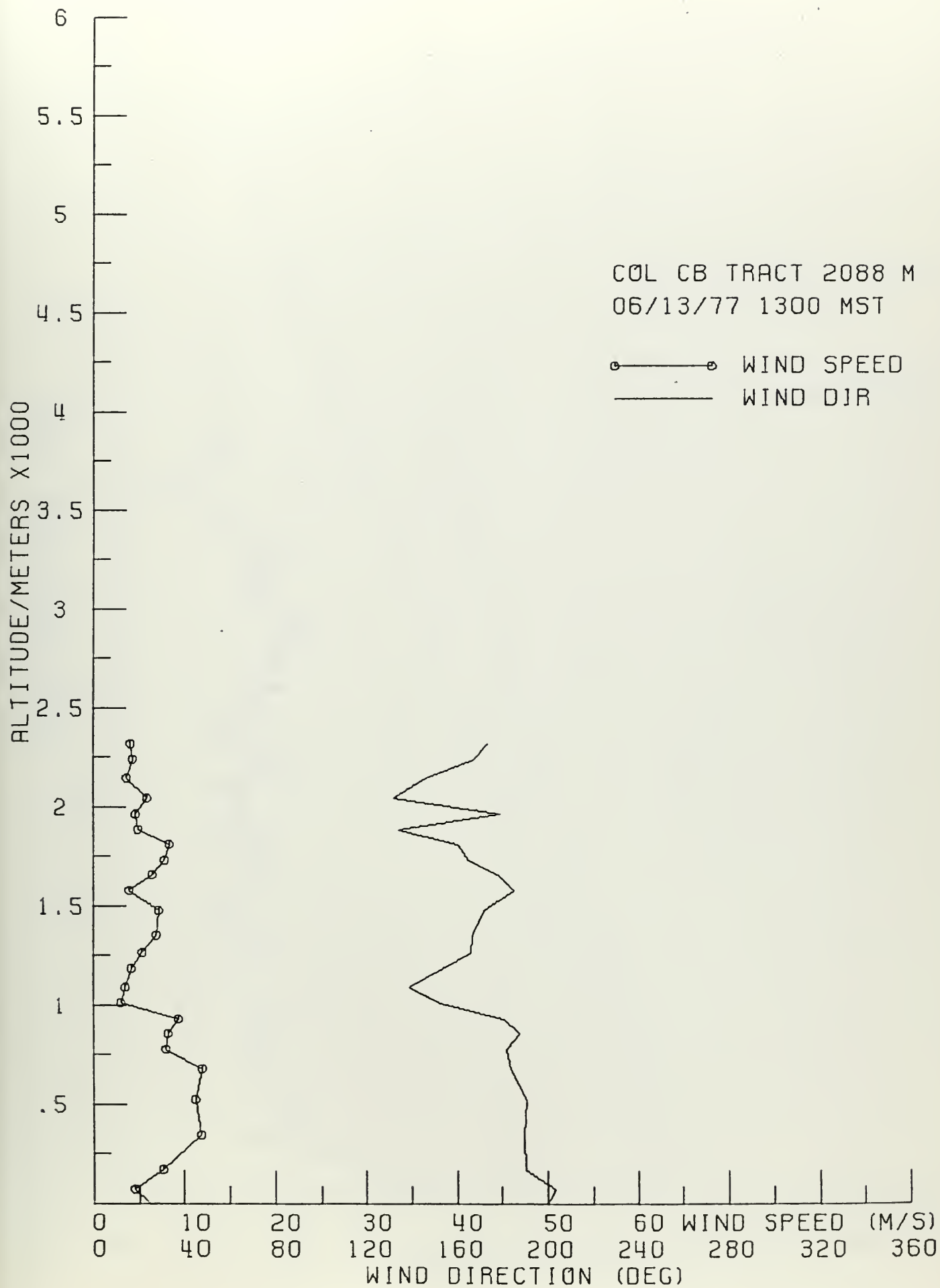
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2088.	1.3	-1.6	2.1	320.
0.8	76.	2164.	1.4	-1.8	2.3	321.
1.5	219.	2307.	1.5	-1.8	2.3	321.
2.3	295.	2383.	2.6	-2.8	3.9	317.
3.0	371.	2459.	3.3	-2.8	4.4	311.
3.8	448.	2536.	3.7	-4.6	5.9	321.
4.5	524.	2612.	3.4	-4.3	5.5	322.
5.3	600.	2688.	3.9	-6.0	5.5	314.
6.0	676.	2764.	8.9	-6.6	11.1	307.
6.8	752.	2840.	6.5	-7.6	9.0	313.
7.5	829.	2917.	7.8	-7.7	10.8	314.
8.3	905.	2993.	2.8	-1.1	3.4	304.
9.0	1009.	3097.	1.1	0.0	1.1	292.
9.8	1113.	3224.	1.2	0.0	2.2	288.
10.5	1268.	3356.	0.6	0.0	1.6	290.
11.3	1418.	3506.	1.4	0.0	5.0	301.
12.0	1559.	3647.	5.1	2.7	8.8	298.
12.8	1672.	3760.	4.8	3.5	11.4	296.
13.5	1773.	3861.	4.6	2.0	11.1	294.
14.3	1881.	3969.	3.9	0.0	4.3	285.
15.0	1984.	4072.	4.8	0.6	5.8	279.
15.8	2078.	4166.	4.0	1.1	5.0	269.
16.5	2206.	4294.	4.5	3.3	5.5	274.
17.3	2366.	4454.	6.0	1.8	6.3	286.
18.0	2510.	4598.	6.5	1.6	7.7	284.

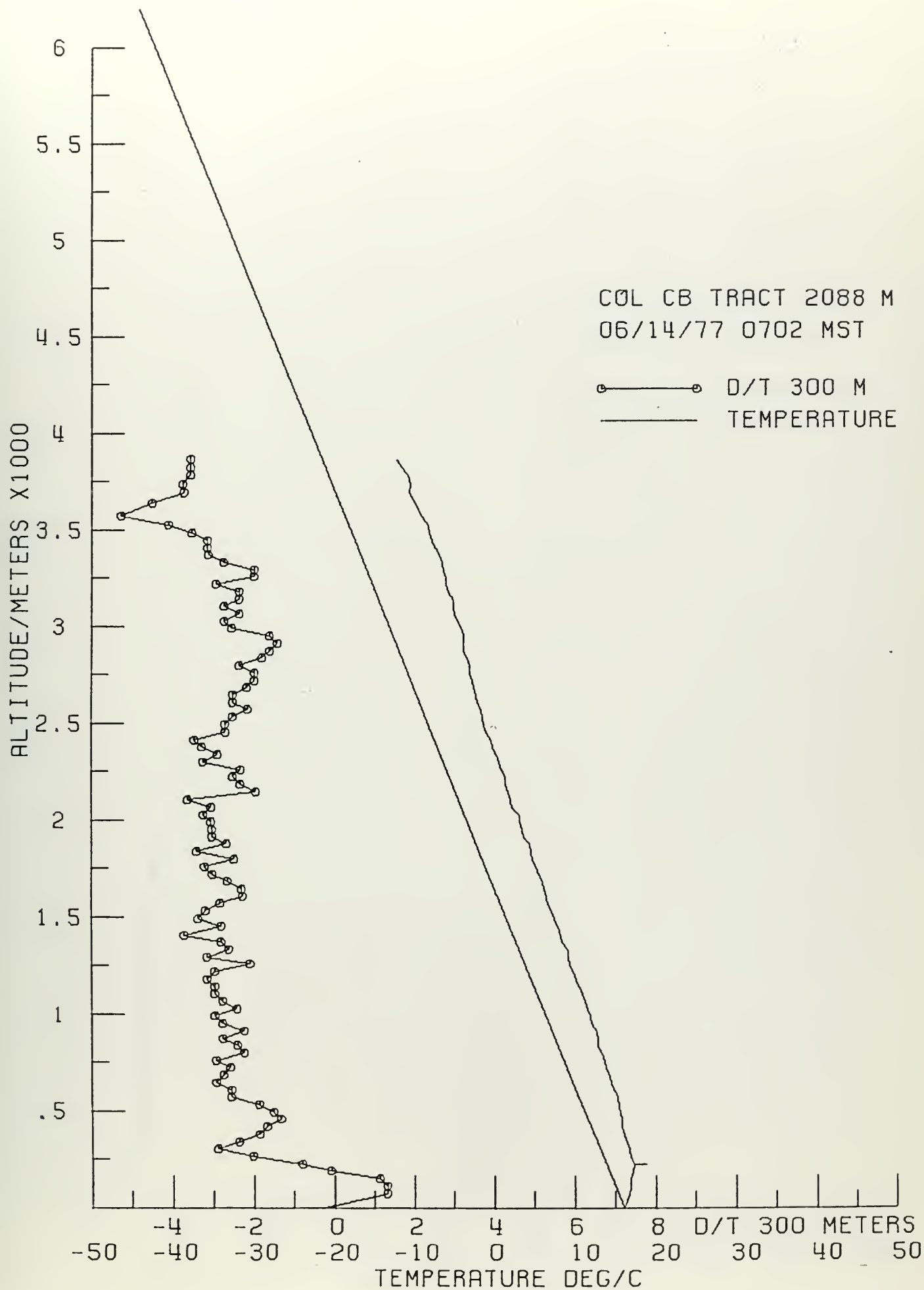


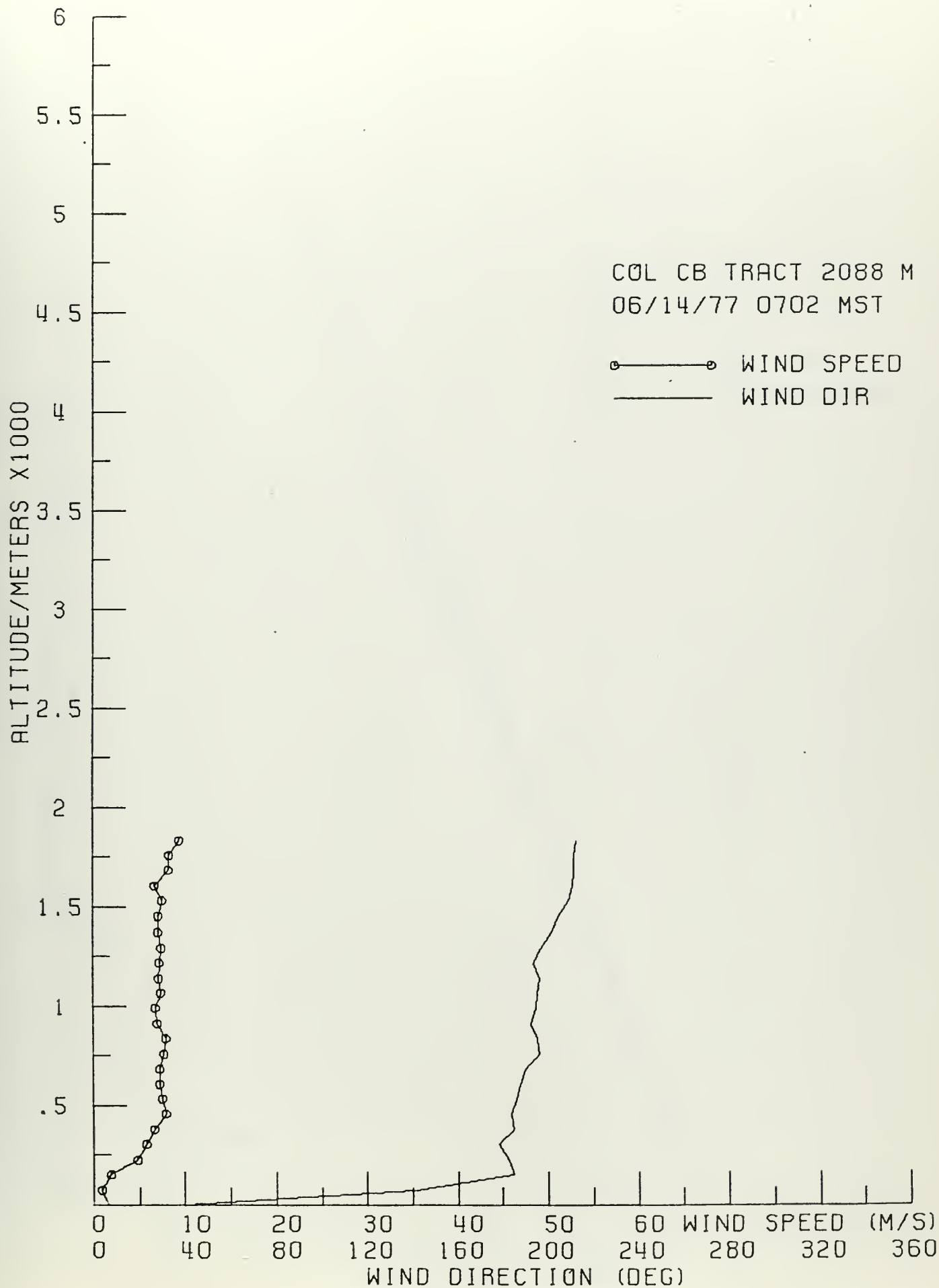




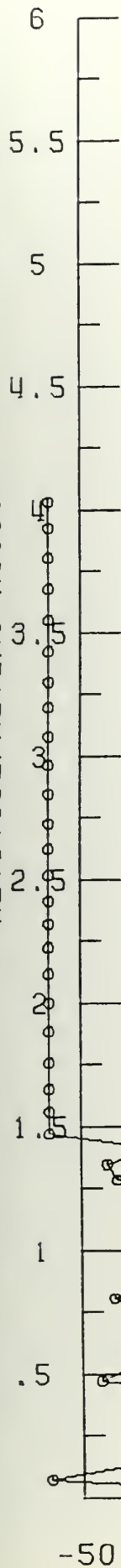








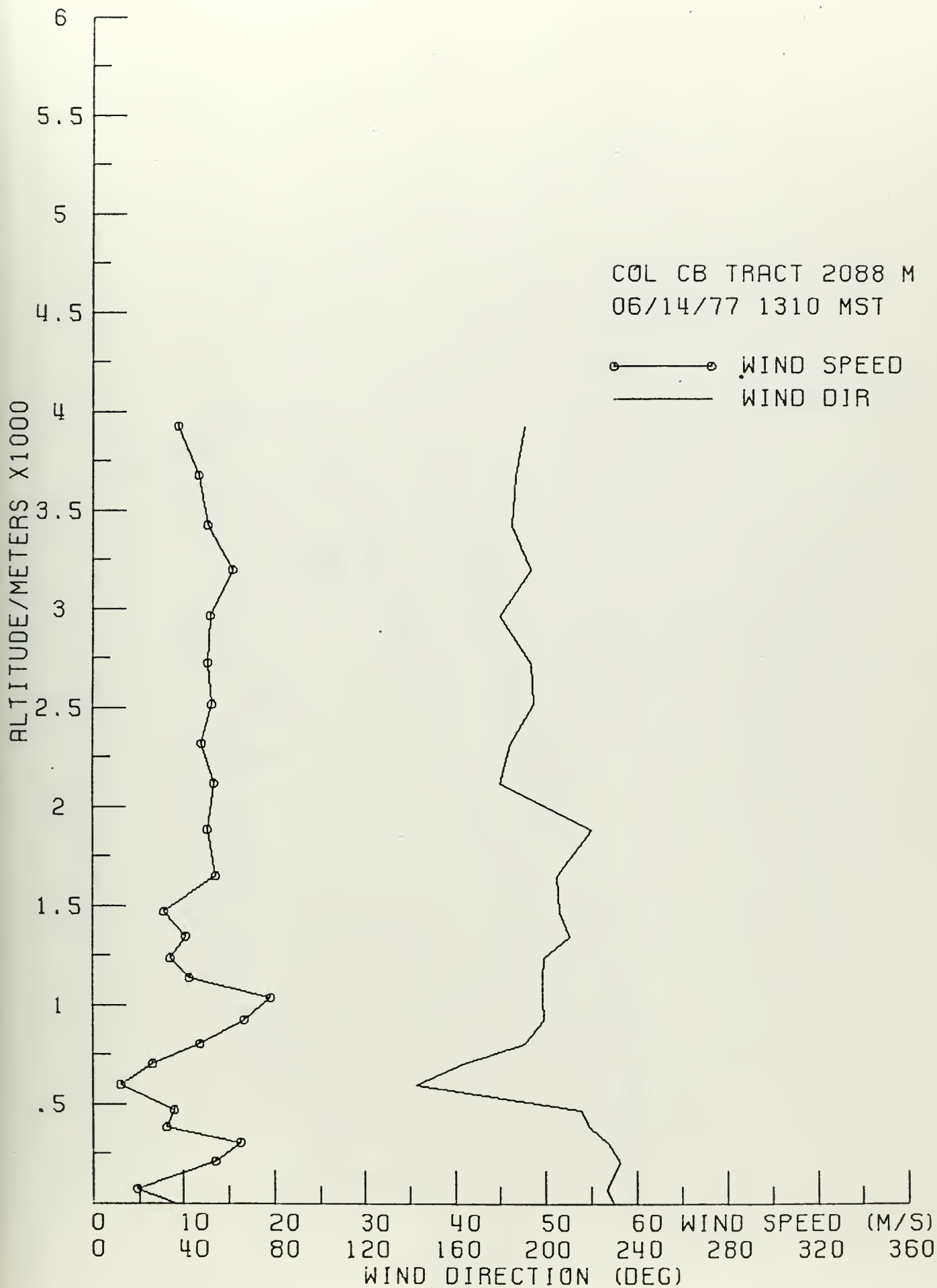
ALTITUDE/METERS X1000



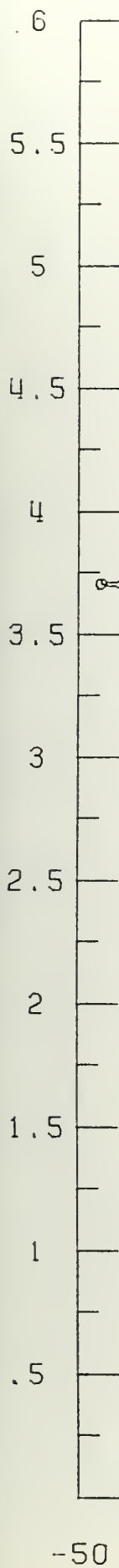
C0L CB TRACT 2088 M
06/14/77 1310 MST

○ — ○ D/T 300 M
— TEMPERATURE

-50 -40 -30 -20 -10 0 10 20 30 40 50
D/T 300 METERS
TEMPERATURE DEG/C



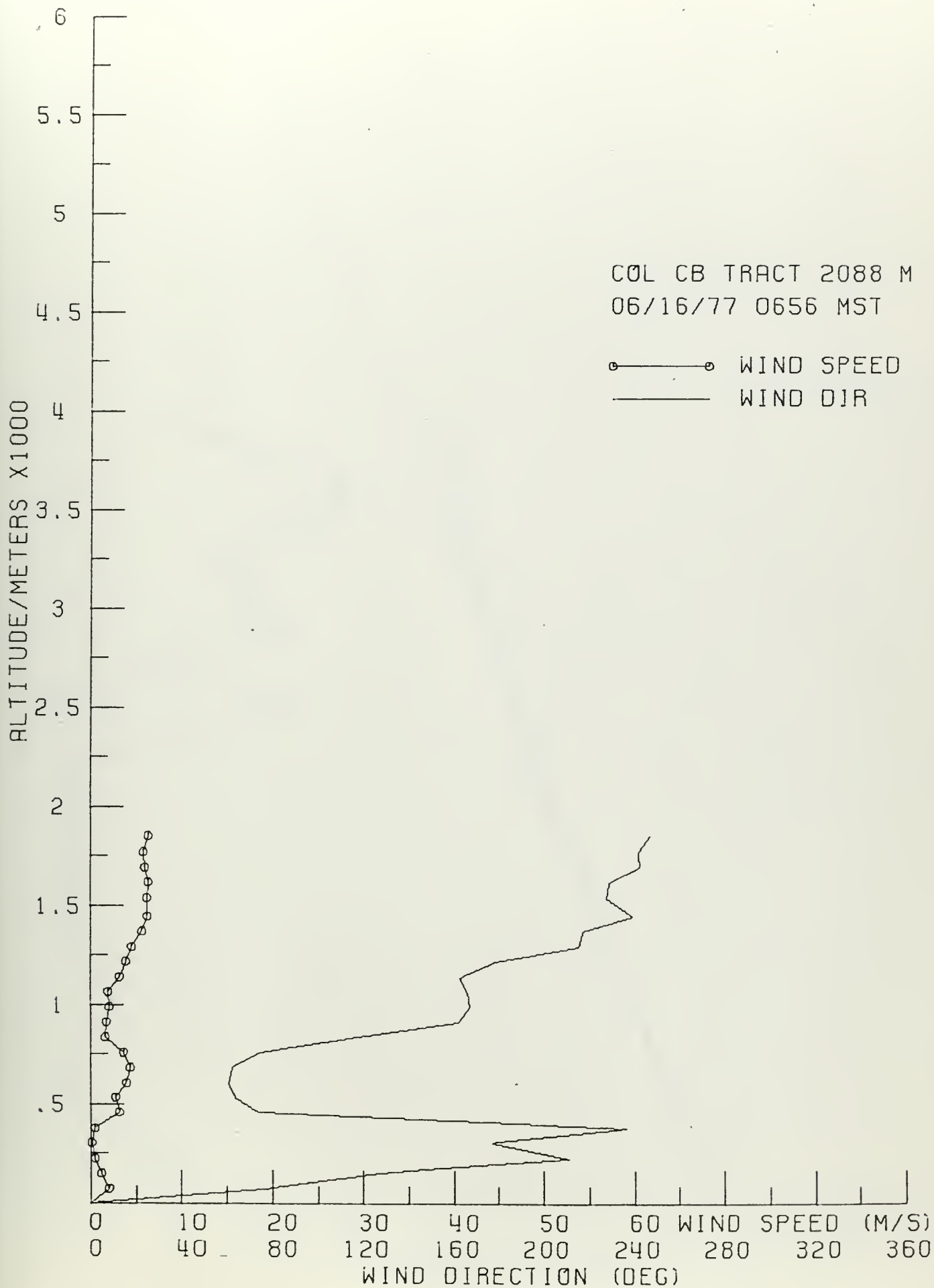
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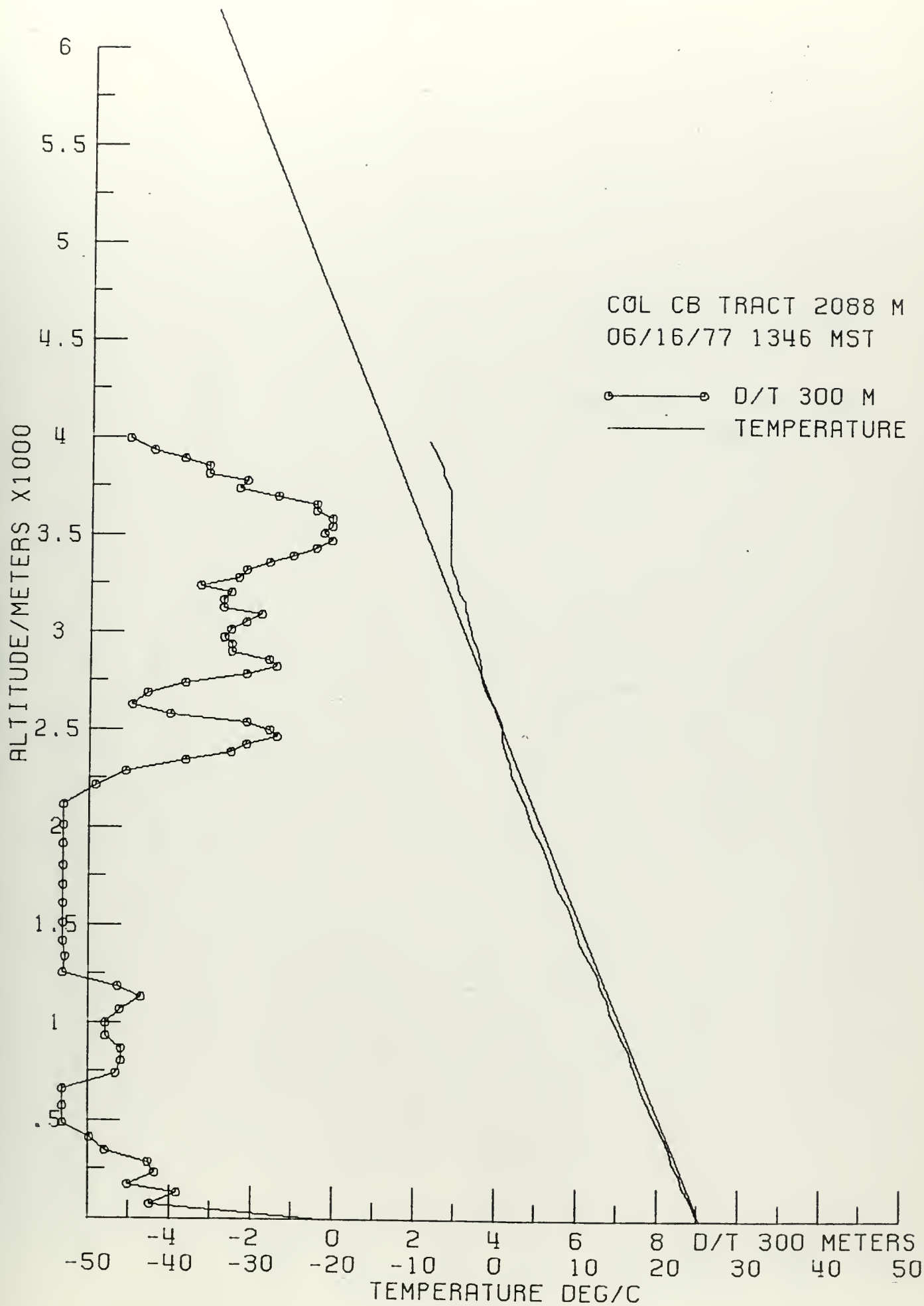


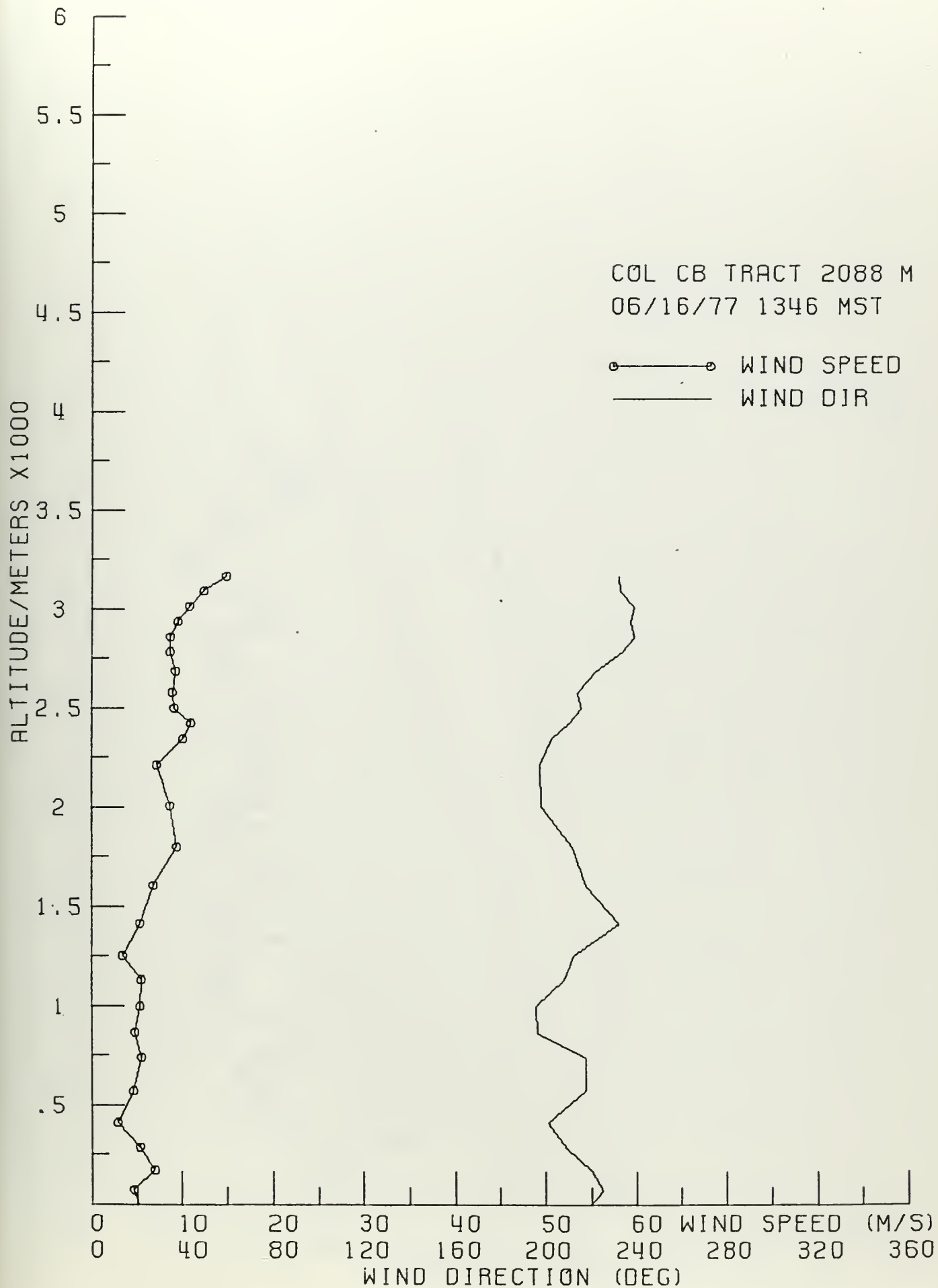
COL CB TRACT 2088 M
06/16/77 0656 MST

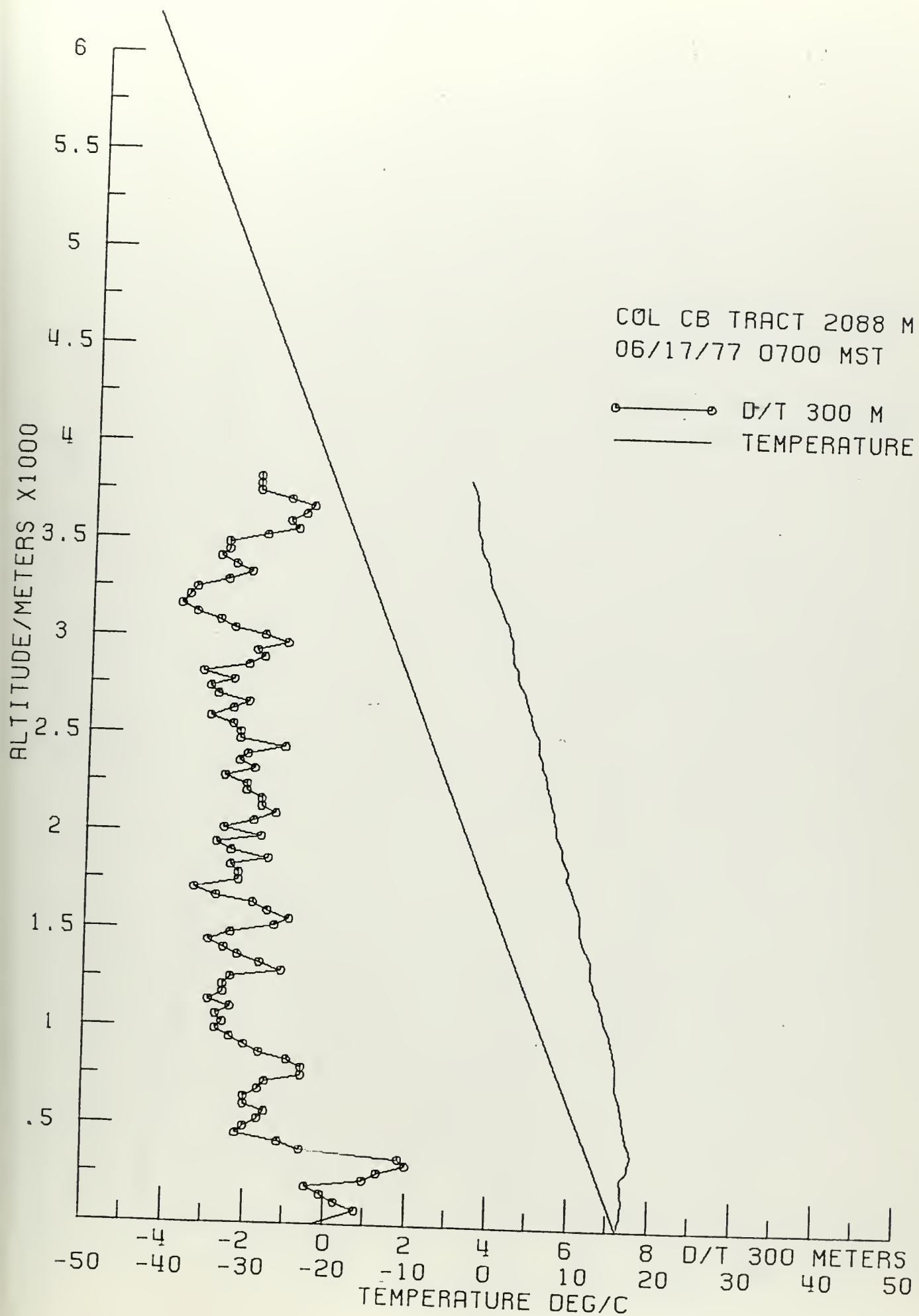
○—○ D/T 300 M
— TEMPERATURE

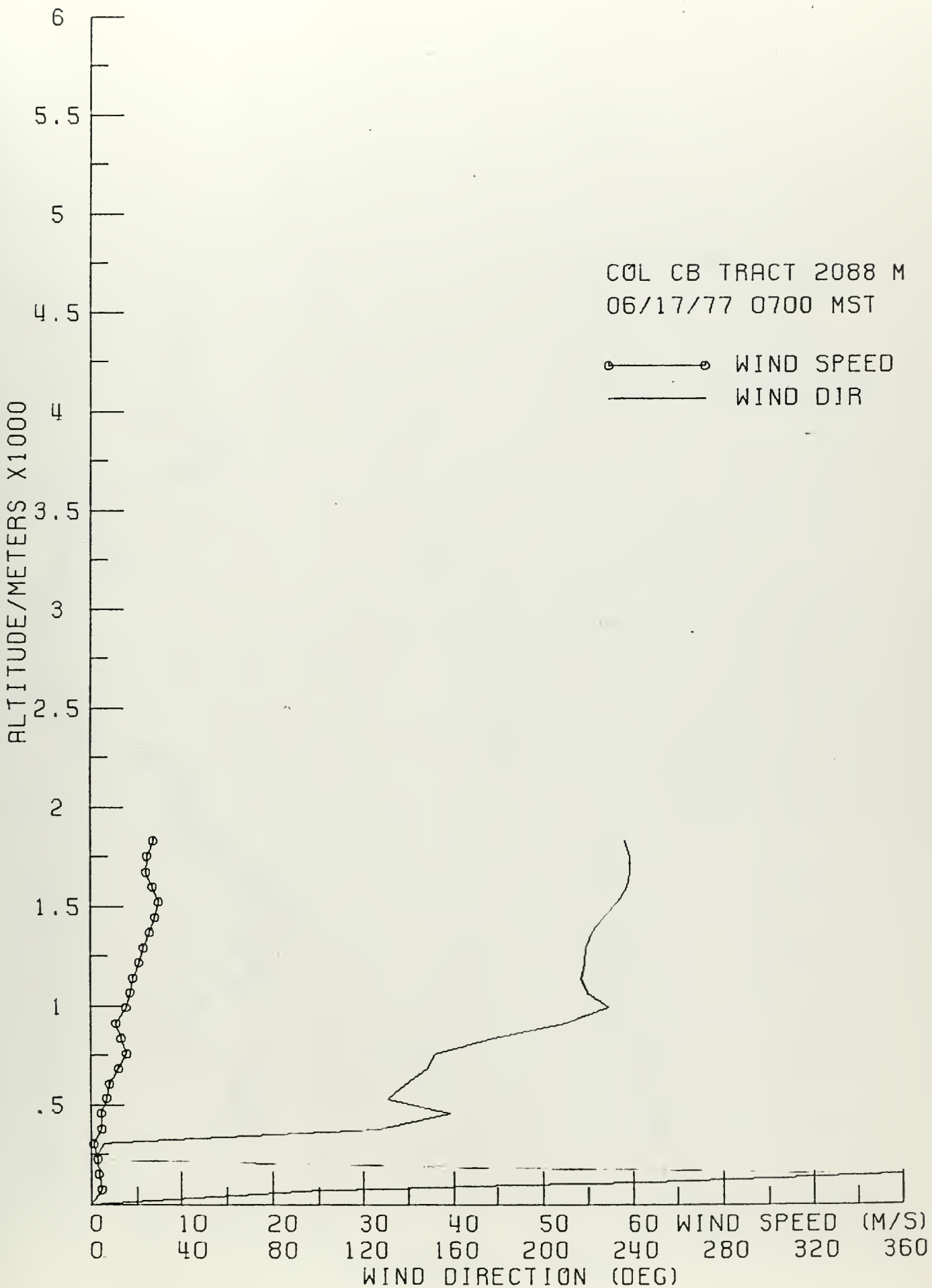
-50 -40 -30 -20 -10 0 10 20 30 40 50 D/T 300 METERS
TEMPERATURE DEG/C

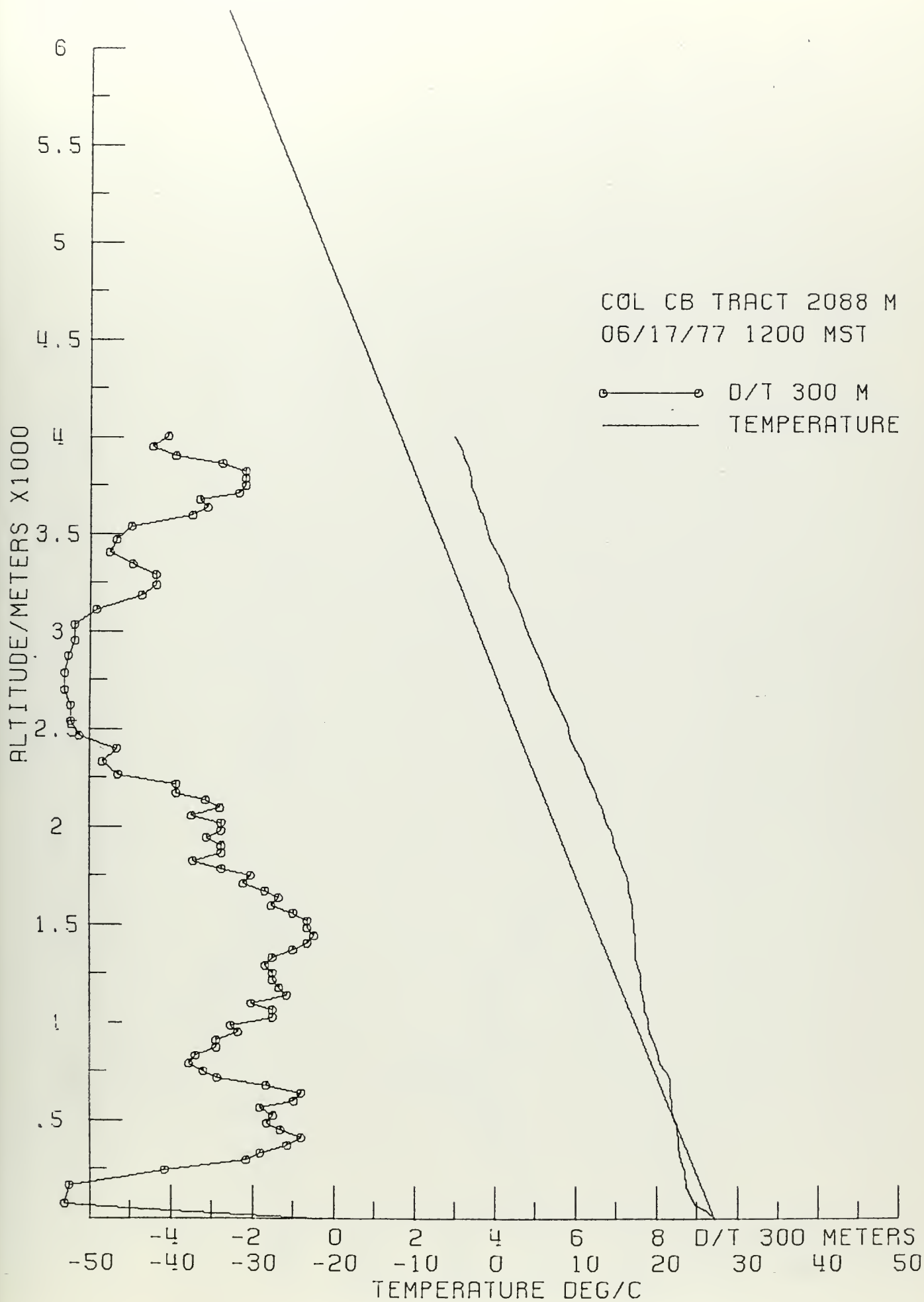


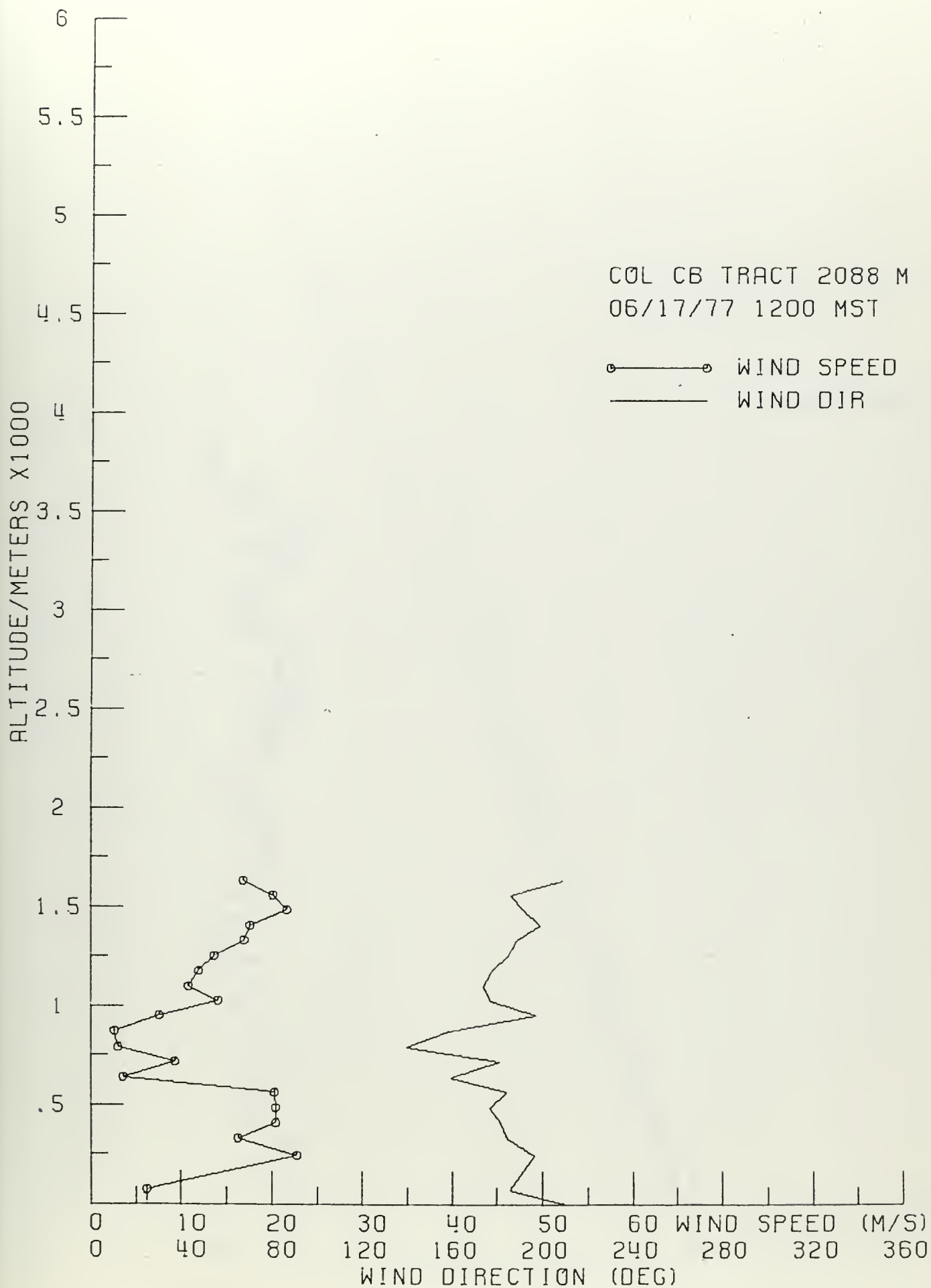


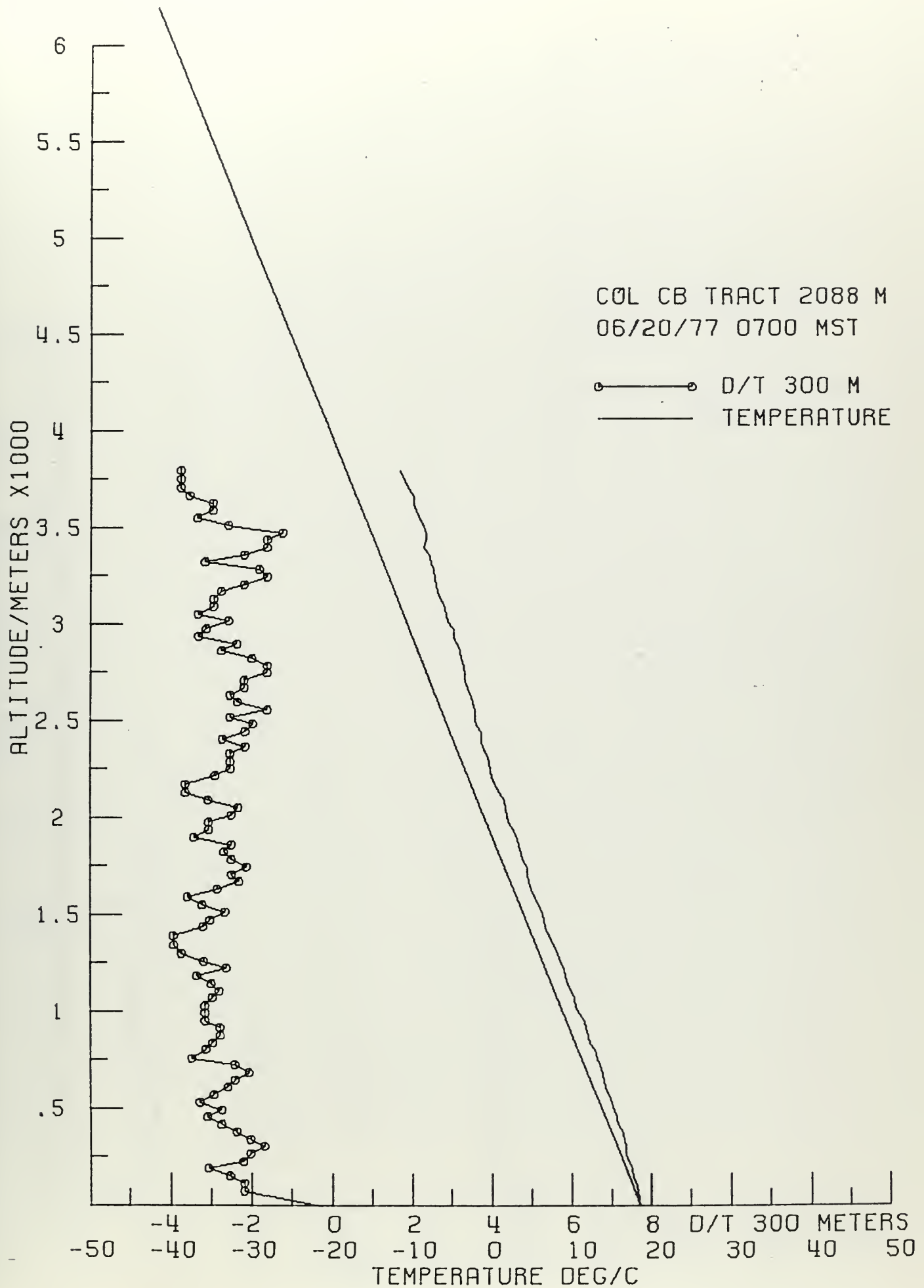


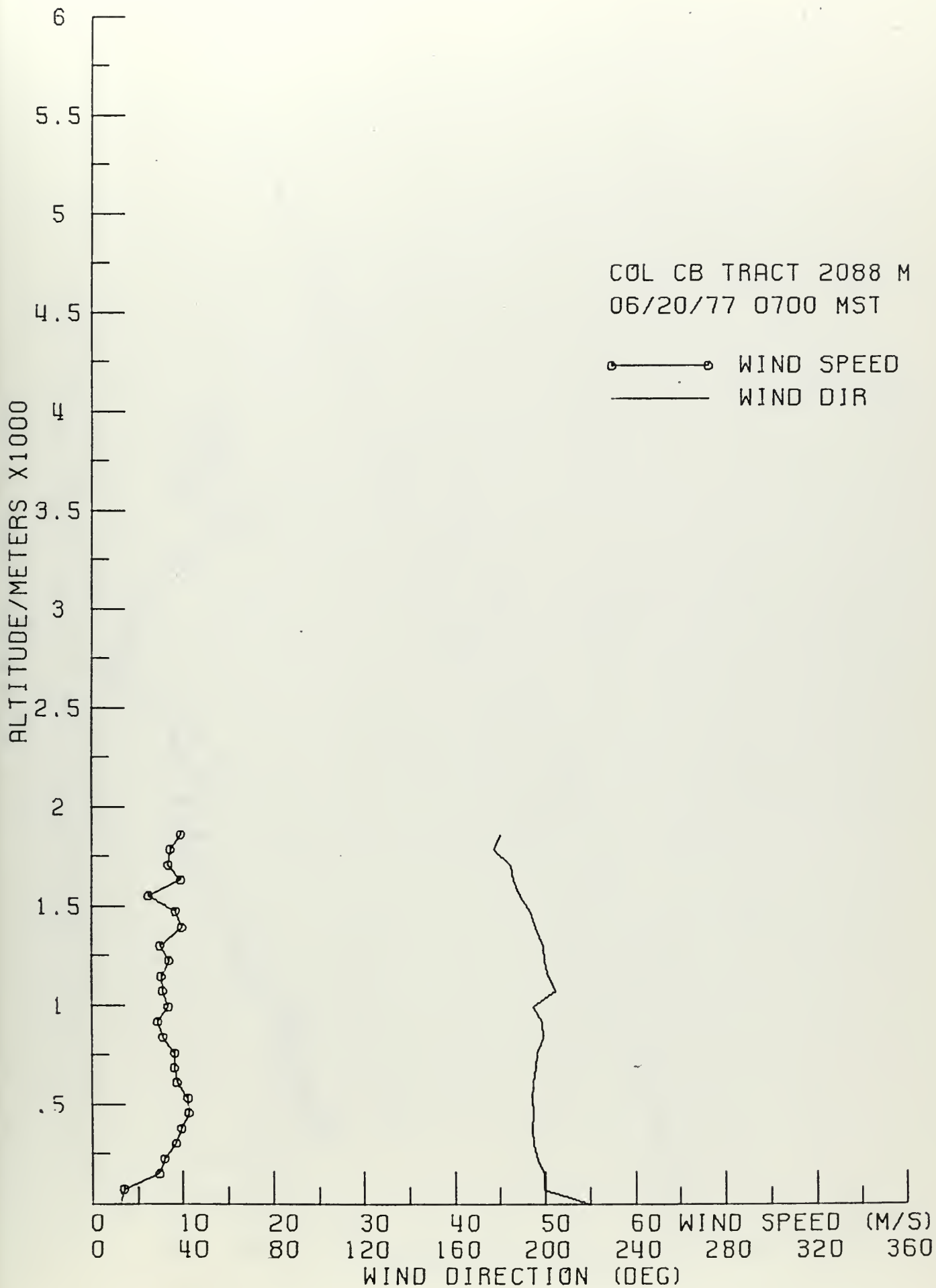




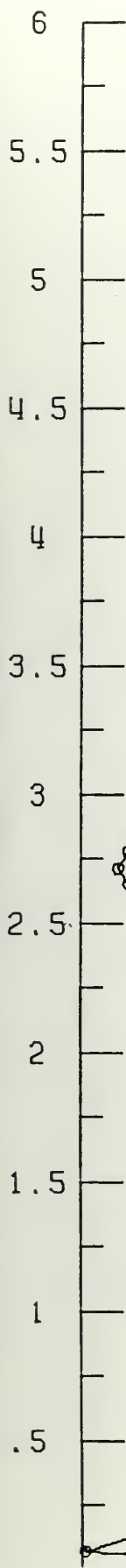








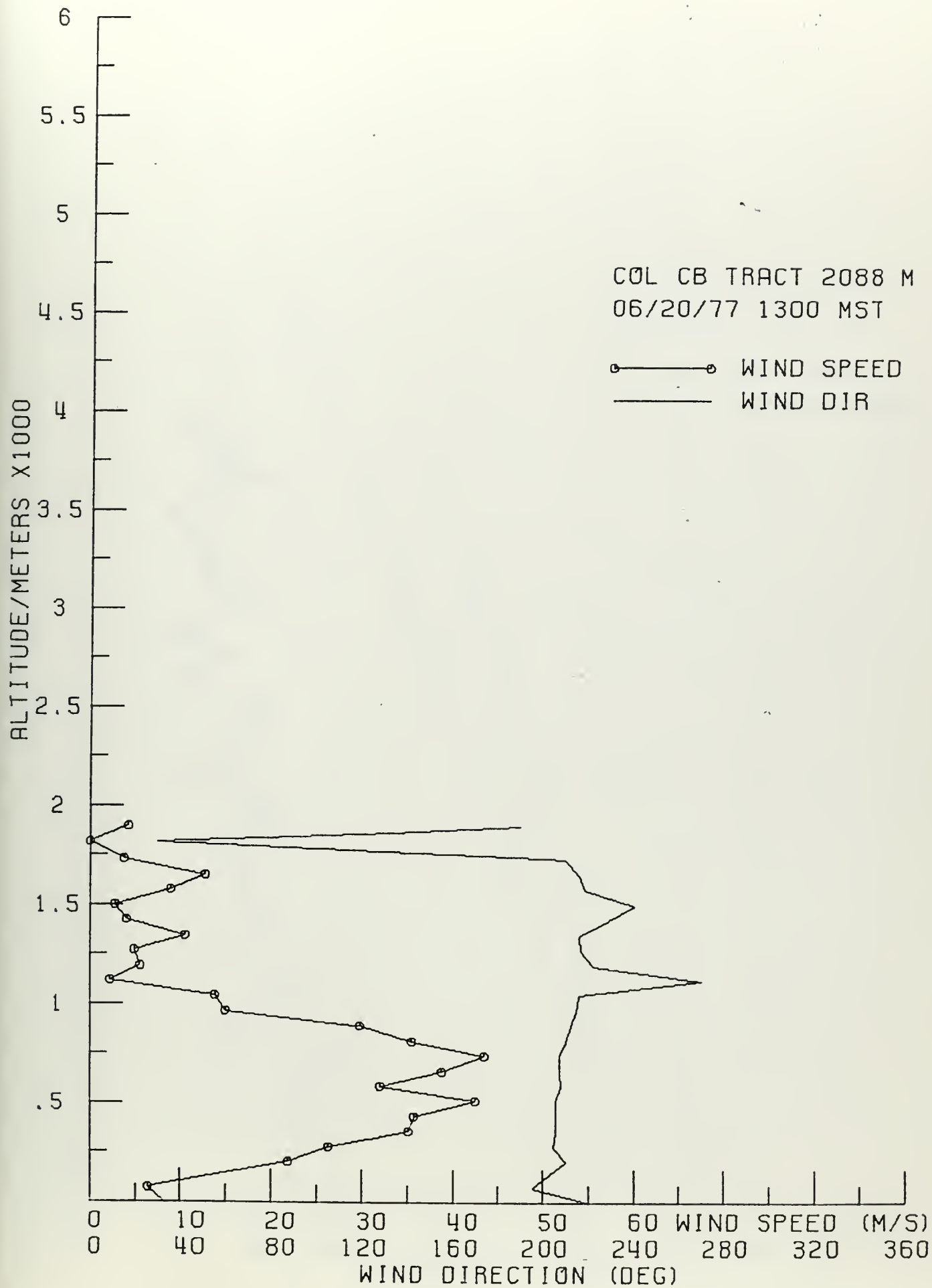
ALTITUDE/METERS X1000



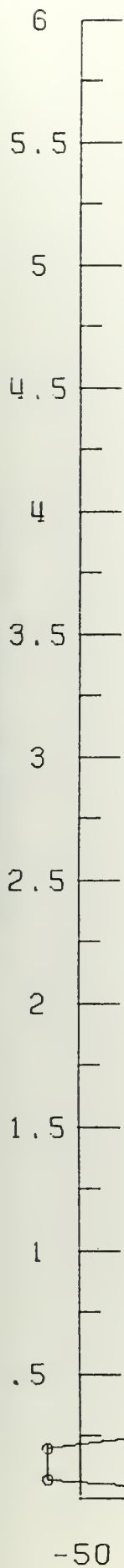
COL CB TRACT 2088 M
06/20/77 1300 MST

○—○ D/T 300 M
— TEMPERATURE

-50 -40 -30 -20 -10 0 10 20 30 40 50 D/T 300 METERS
TEMPERATURE DEG/C



ALTITUDE/METERS X1000

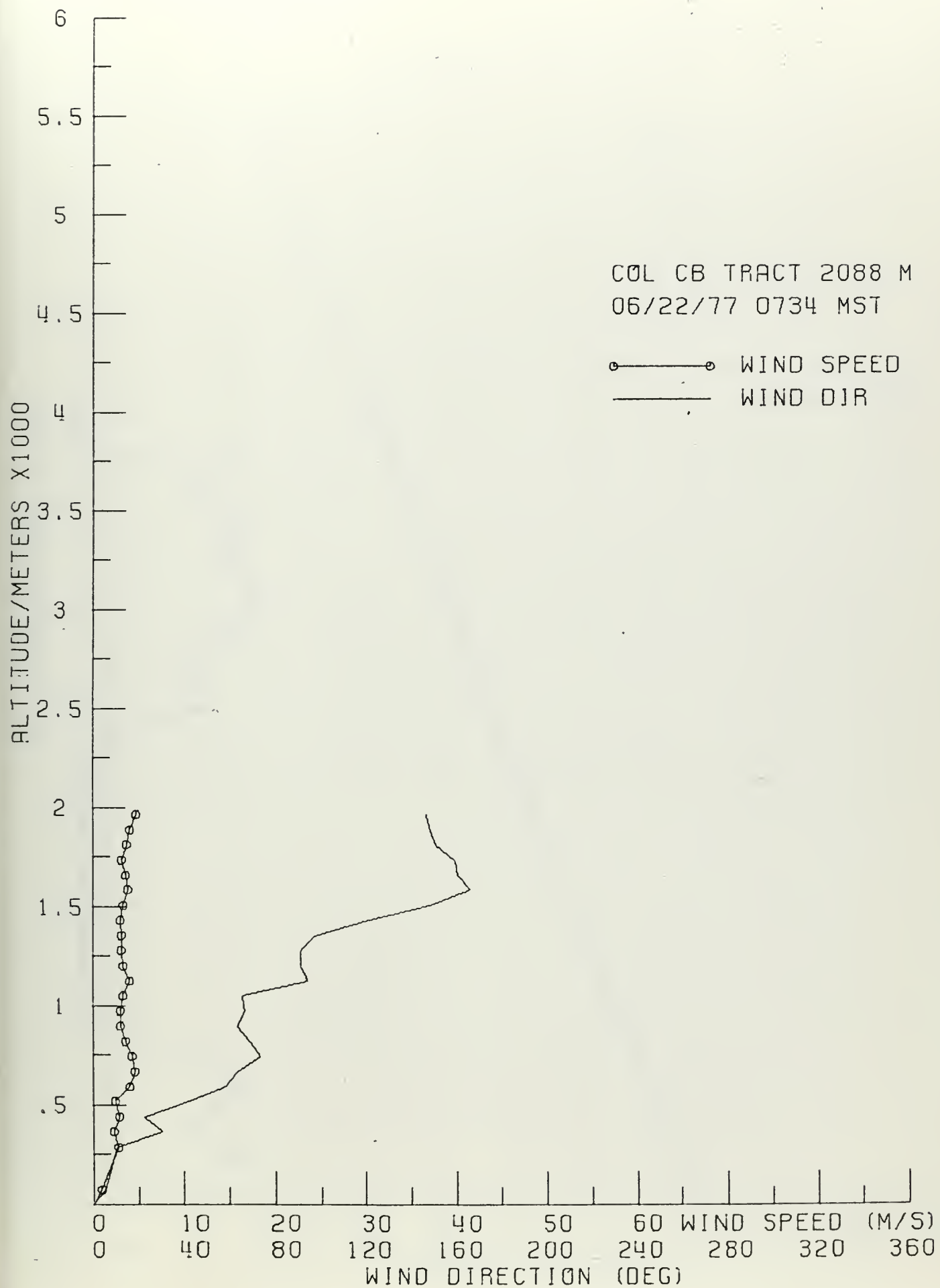


COL CB TRACT 2088 M
06/22/77 0734 MST

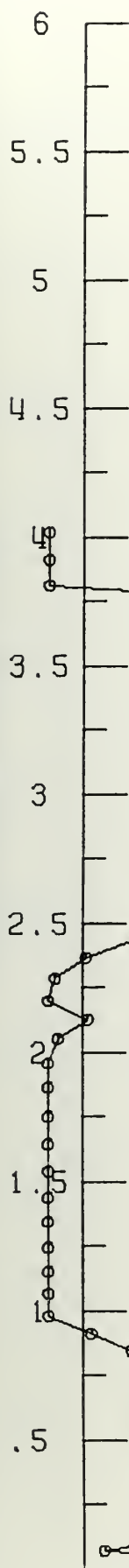
○—○ D/T 300 M
— TEMPERATURE

TEMPERATURE DEG/C

D/T 300 METERS



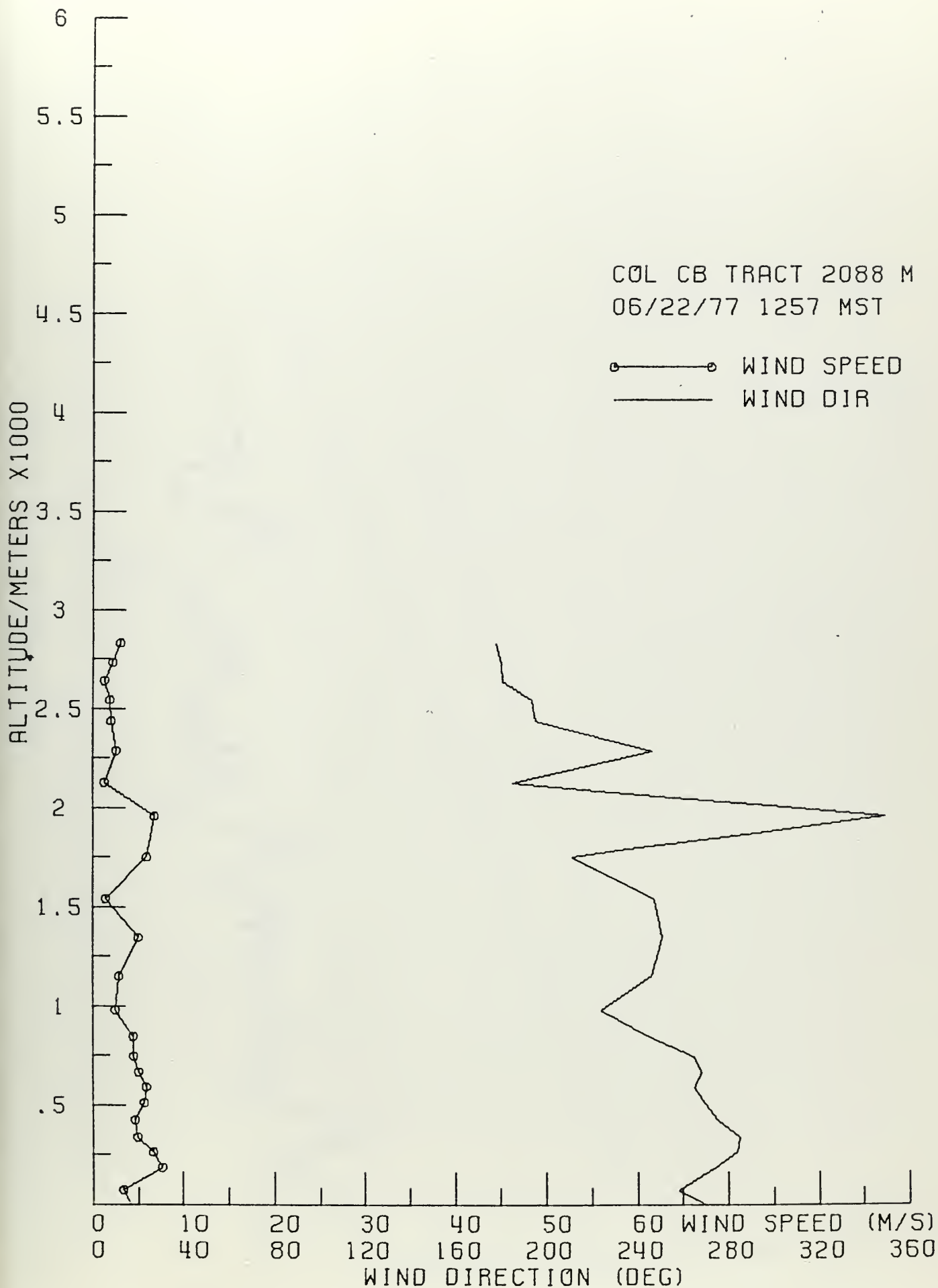
ALTITUDE/METERS X1000



C0L CB TRACT 2088 M
06/22/77 1257 MST

○—○ D/T 300 M
— TEMPERATURE

-50 -40 -30 -20 -10 0 10 20 30 40 50
D/T 300 METERS
TEMPERATURE DEG/C



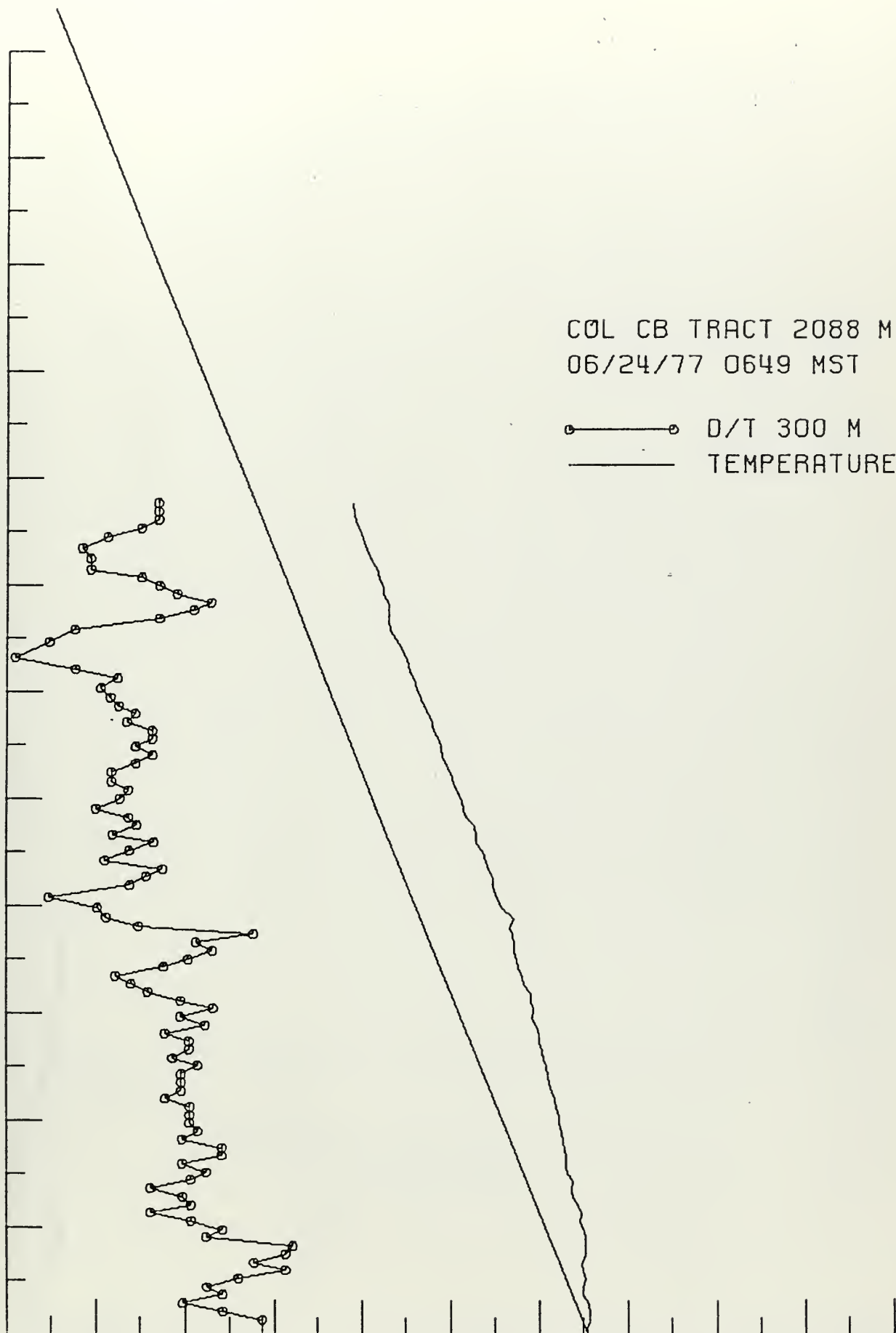
ALTITUDE/METERS X1000

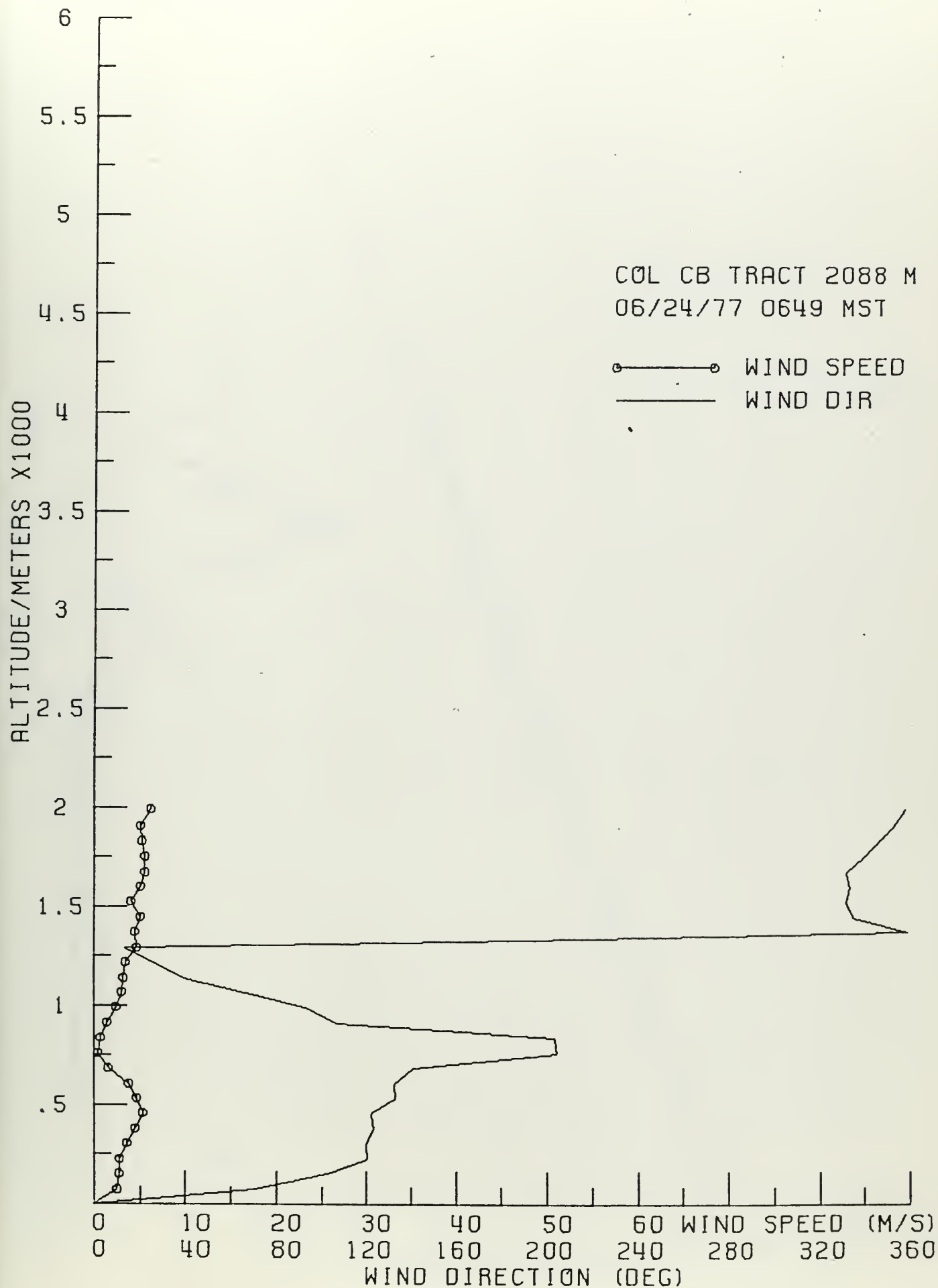
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4.5
4
3.5
3
2.5
2
1.5
1
.5

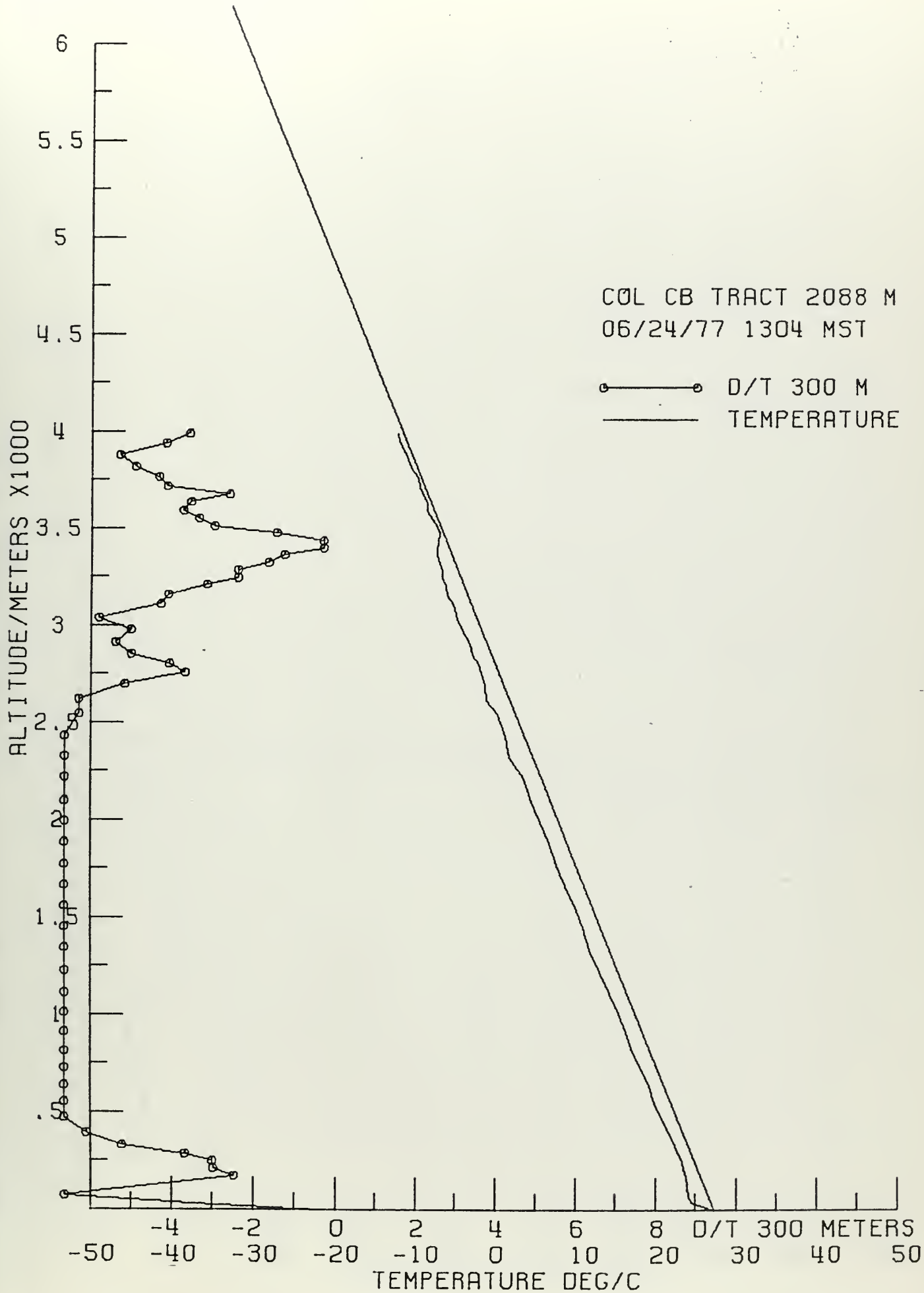
COL CB TRACT 2088 M
06/24/77 0649 MST

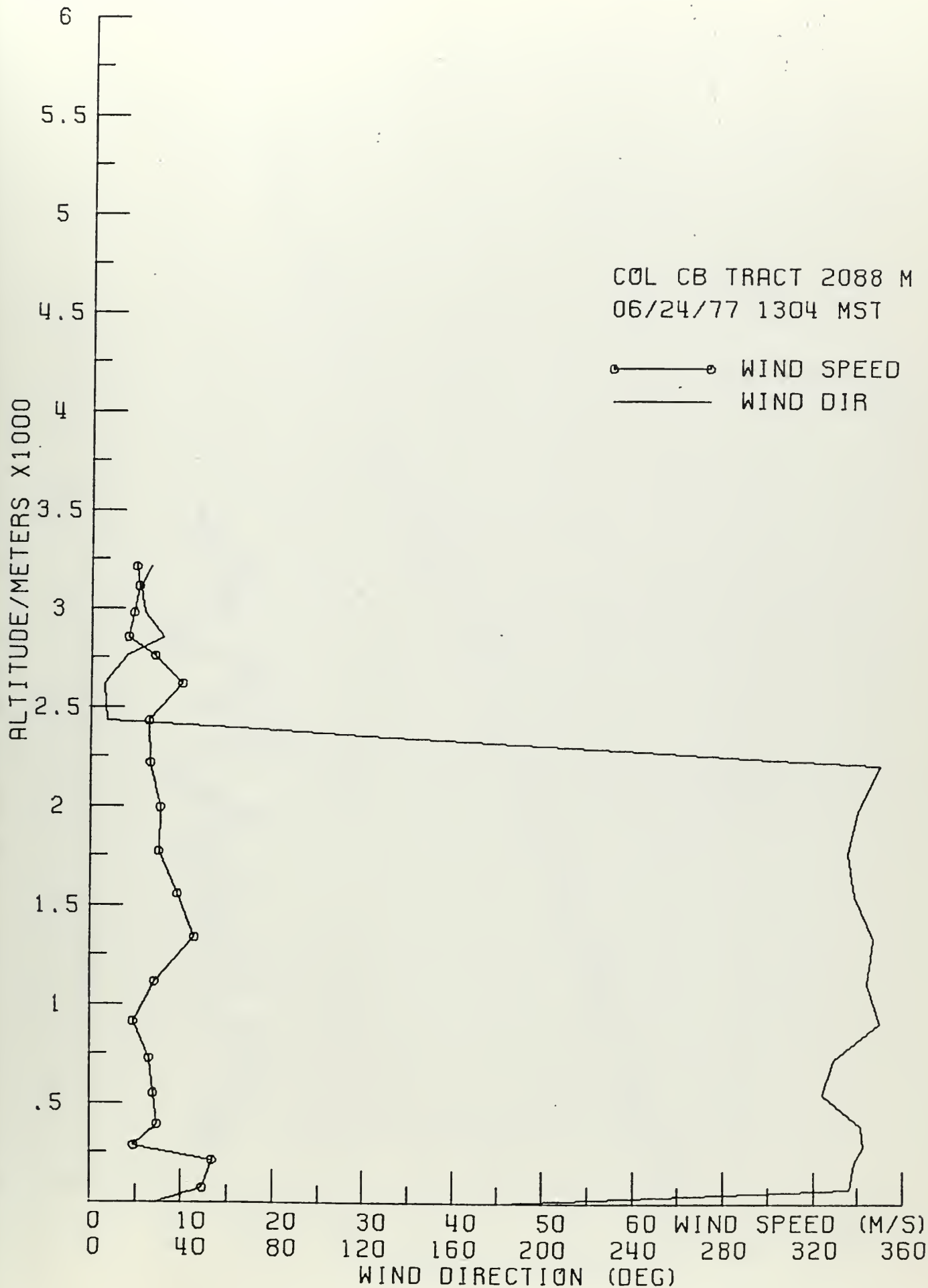
○ — ○ D/T 300 M
— TEMPERATURE

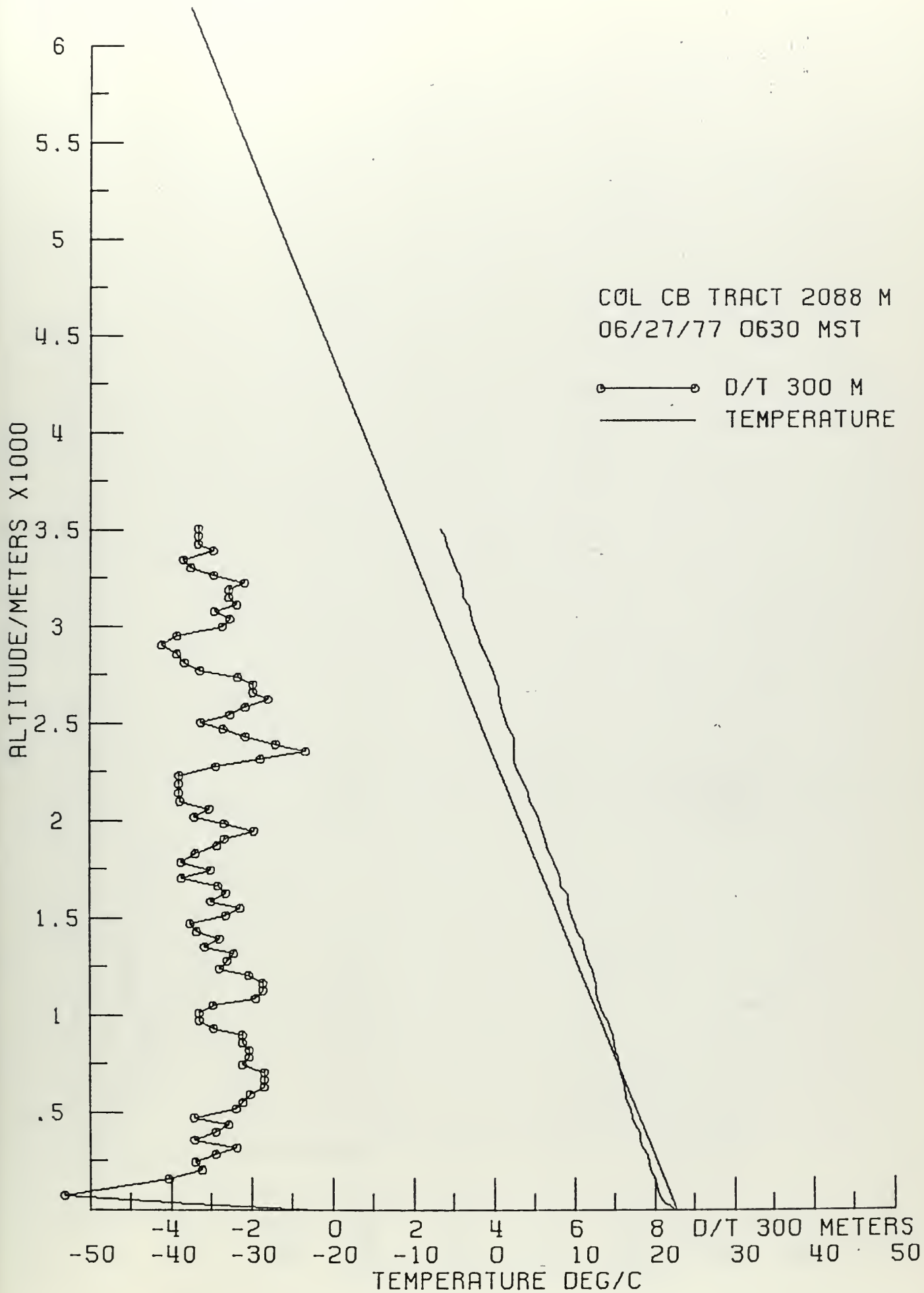
-50 -40 -30 -20 -10 0 10 20 30 40 50
D/T 300 METERS
TEMPERATURE DEG/C

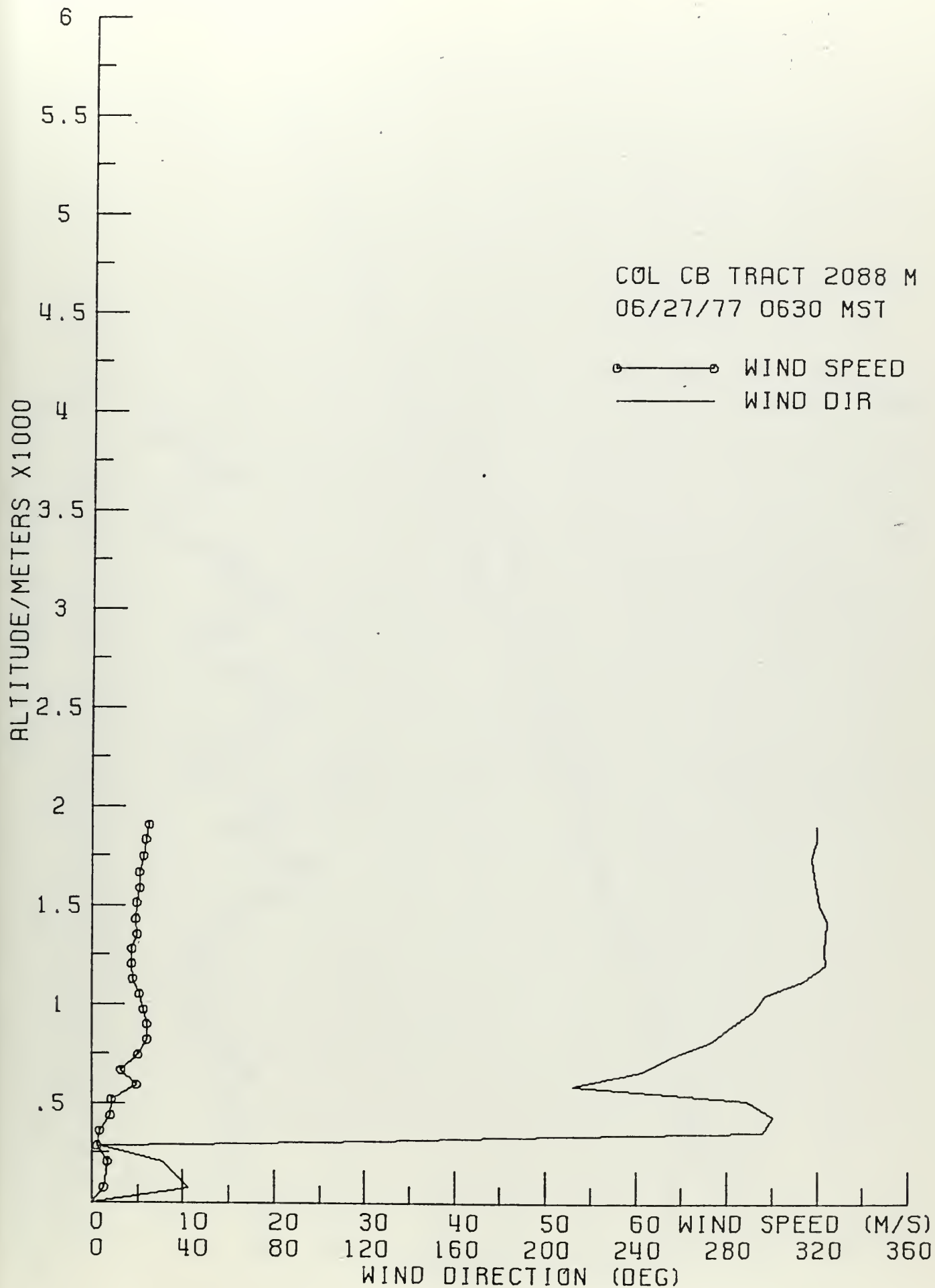




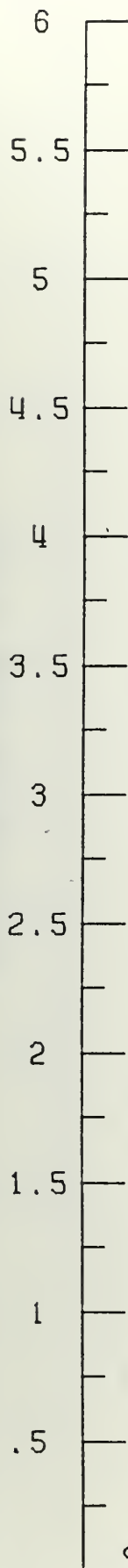








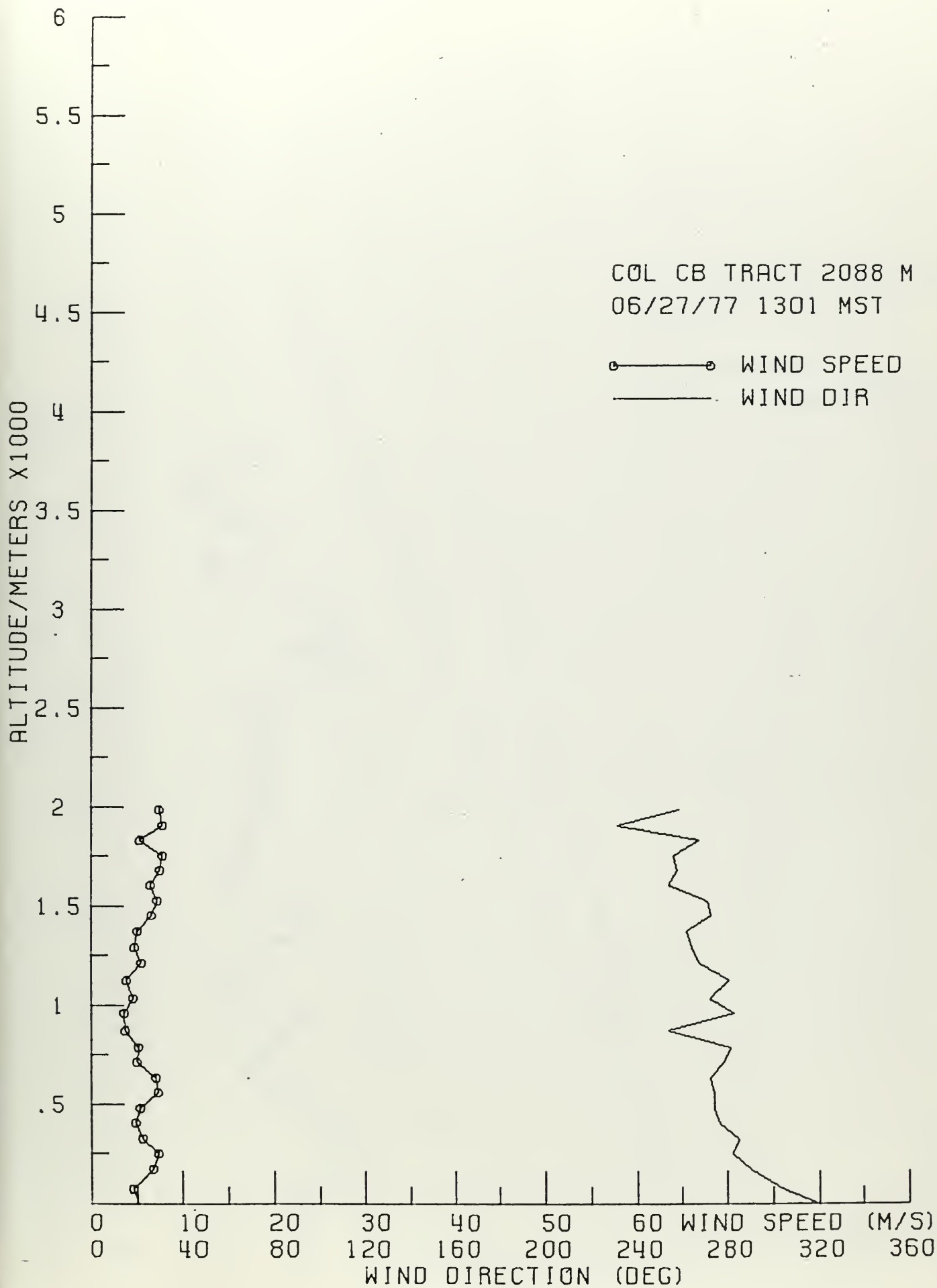
ALTITUDE/METERS X1000

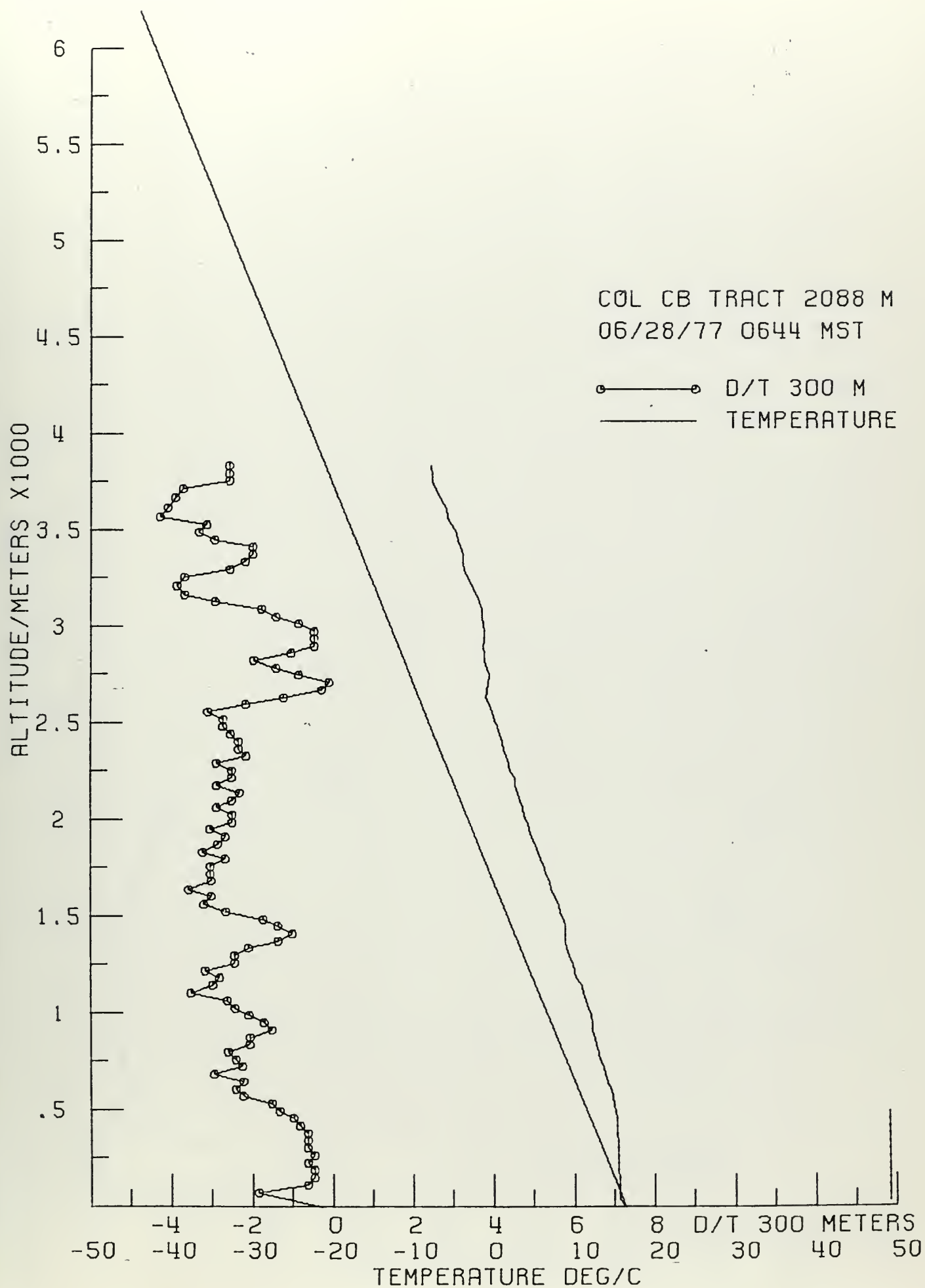


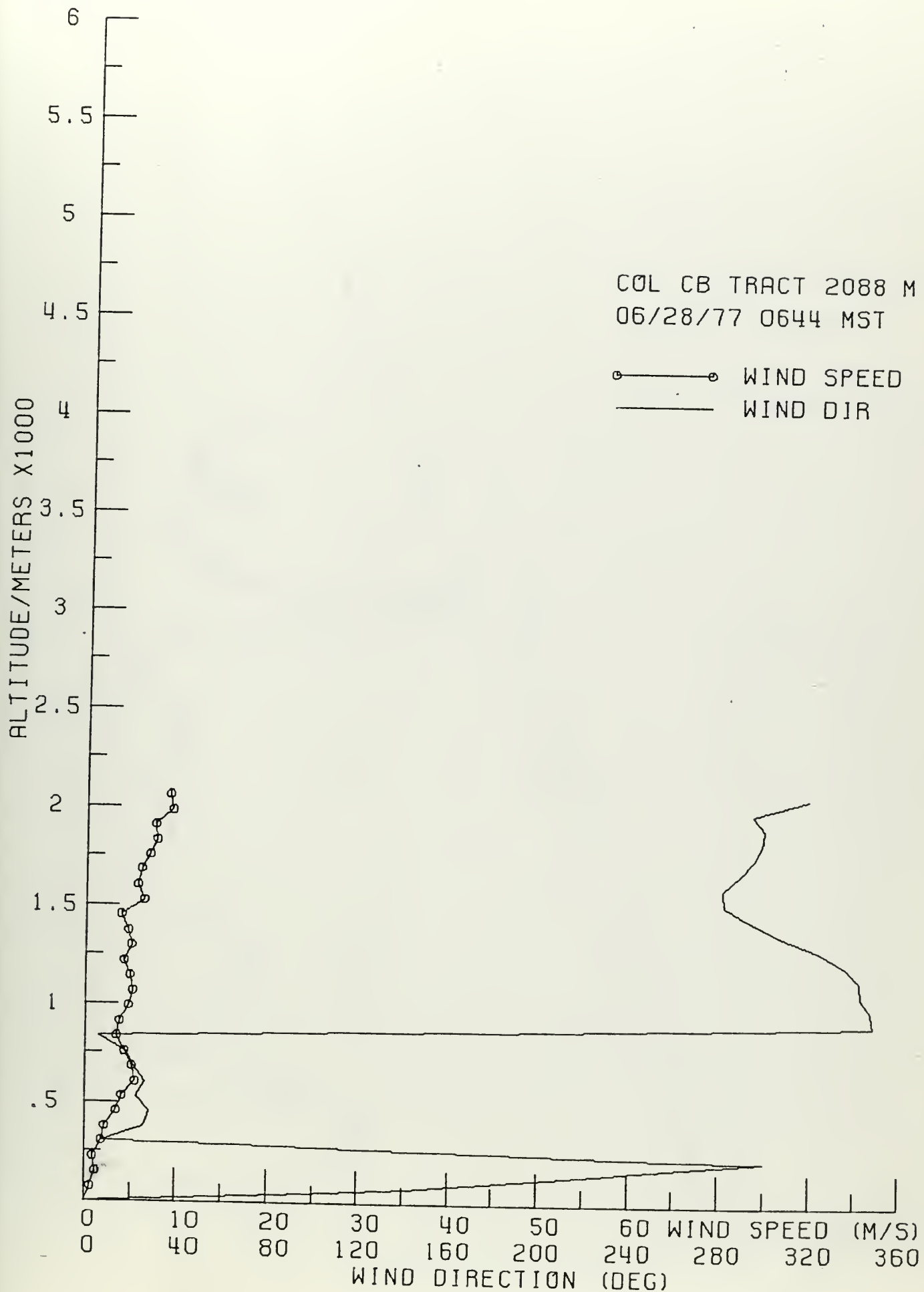
COL CB TRACT 2088 M
06/27/77 1301 MST

○—○ D/T 300 M
— TEMPERATURE

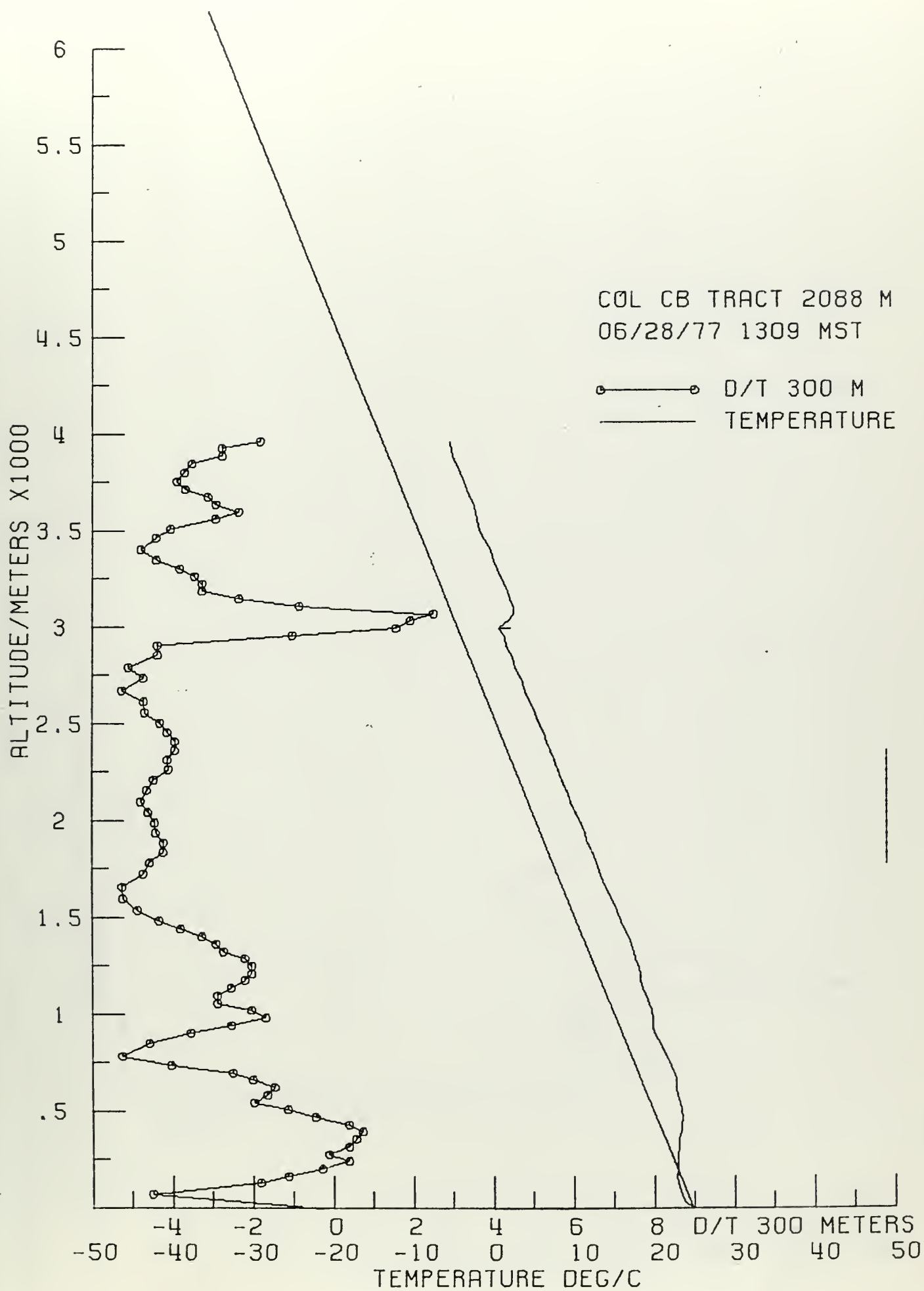
-50 -40 -30 -20 -10 0 10 20 30 40 50
D/T 300 METERS
TEMPERATURE DEG/C

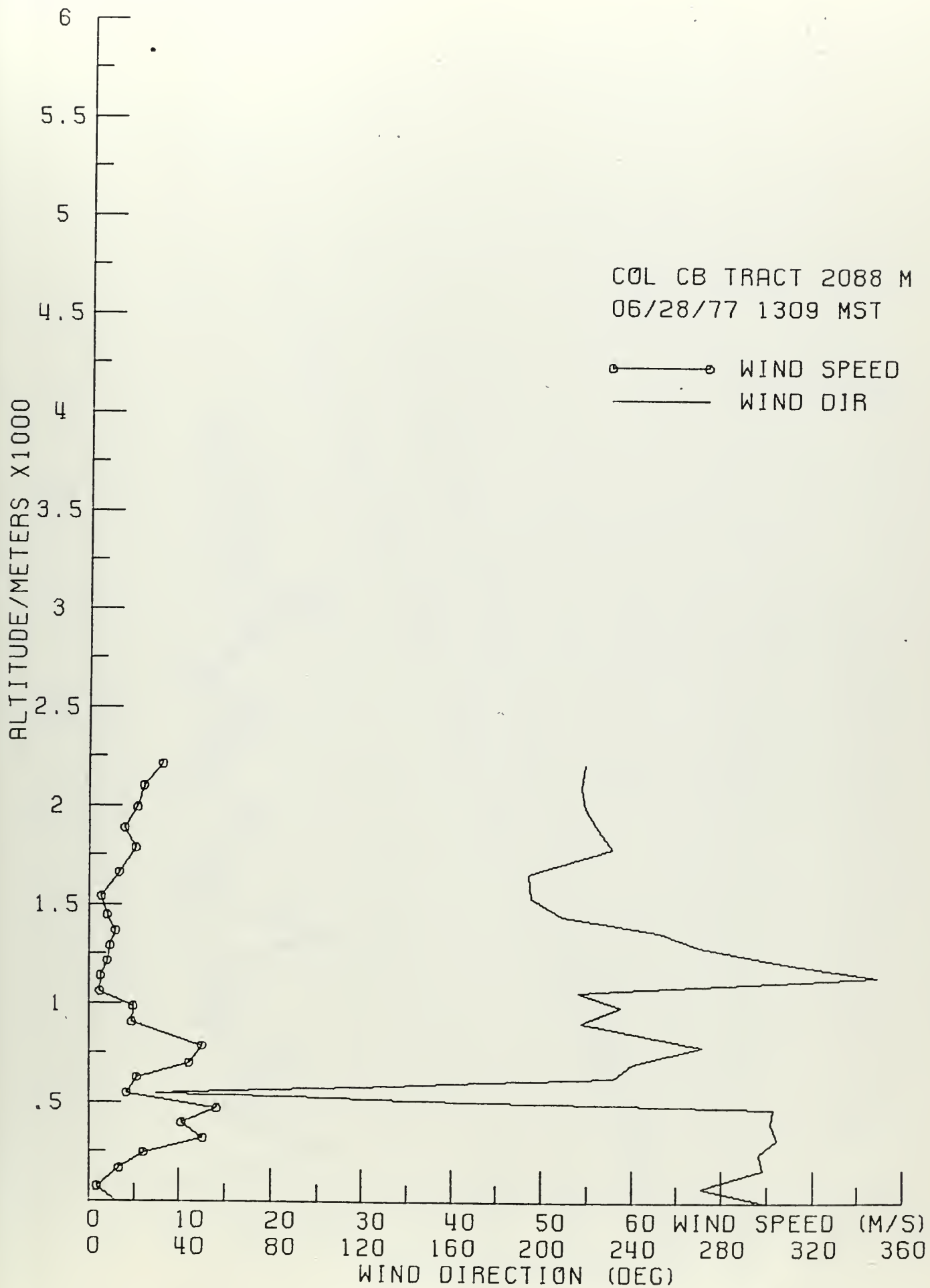




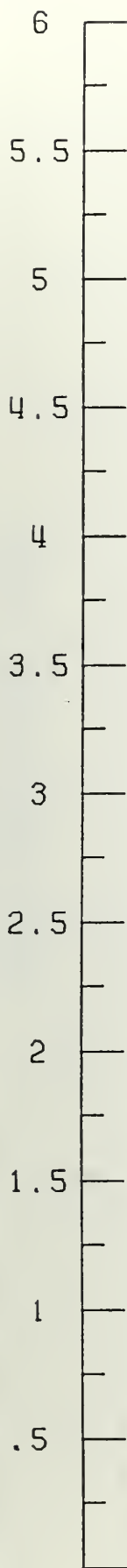






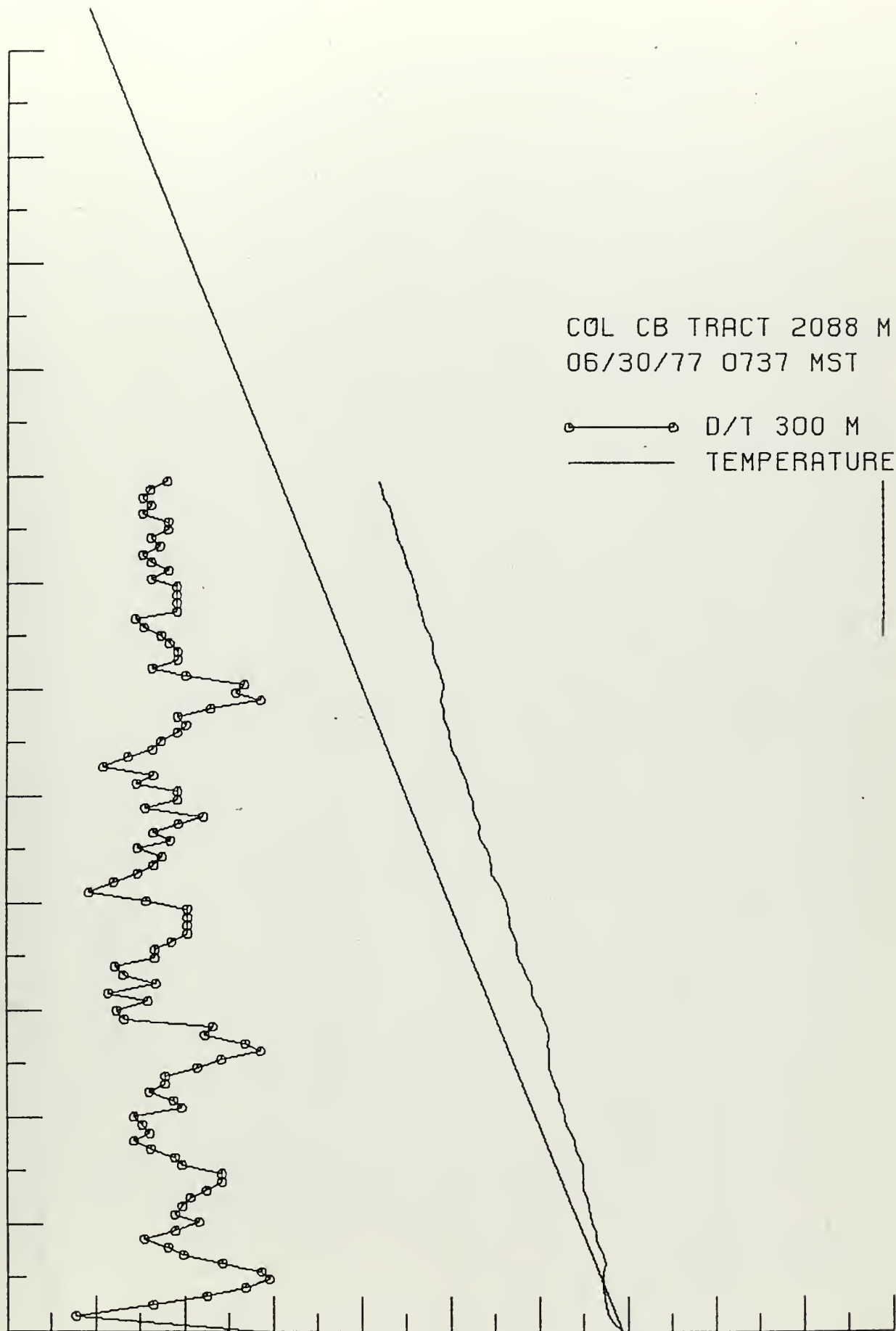
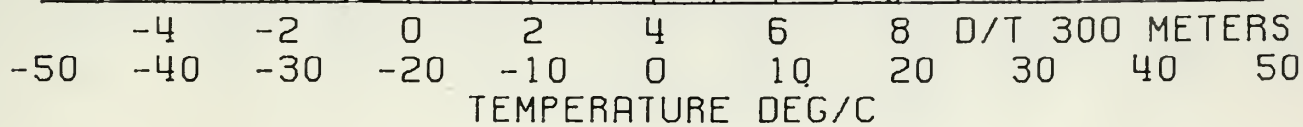


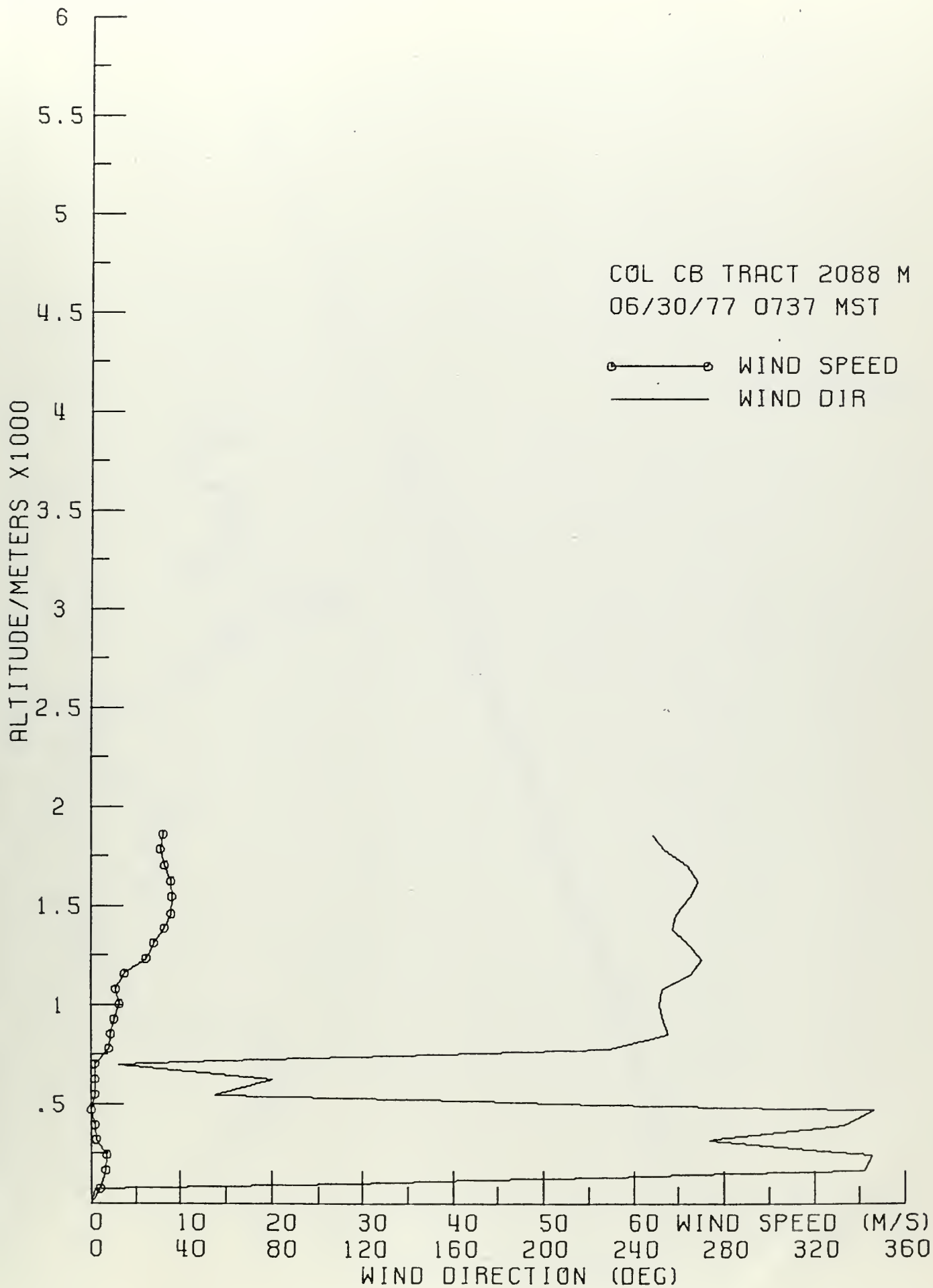
ALTITUDE/METERS X1000



COL CB TRACT 2088 M
06/30/77 0737 MST

○—○ D/T 300 M
— TEMPERATURE

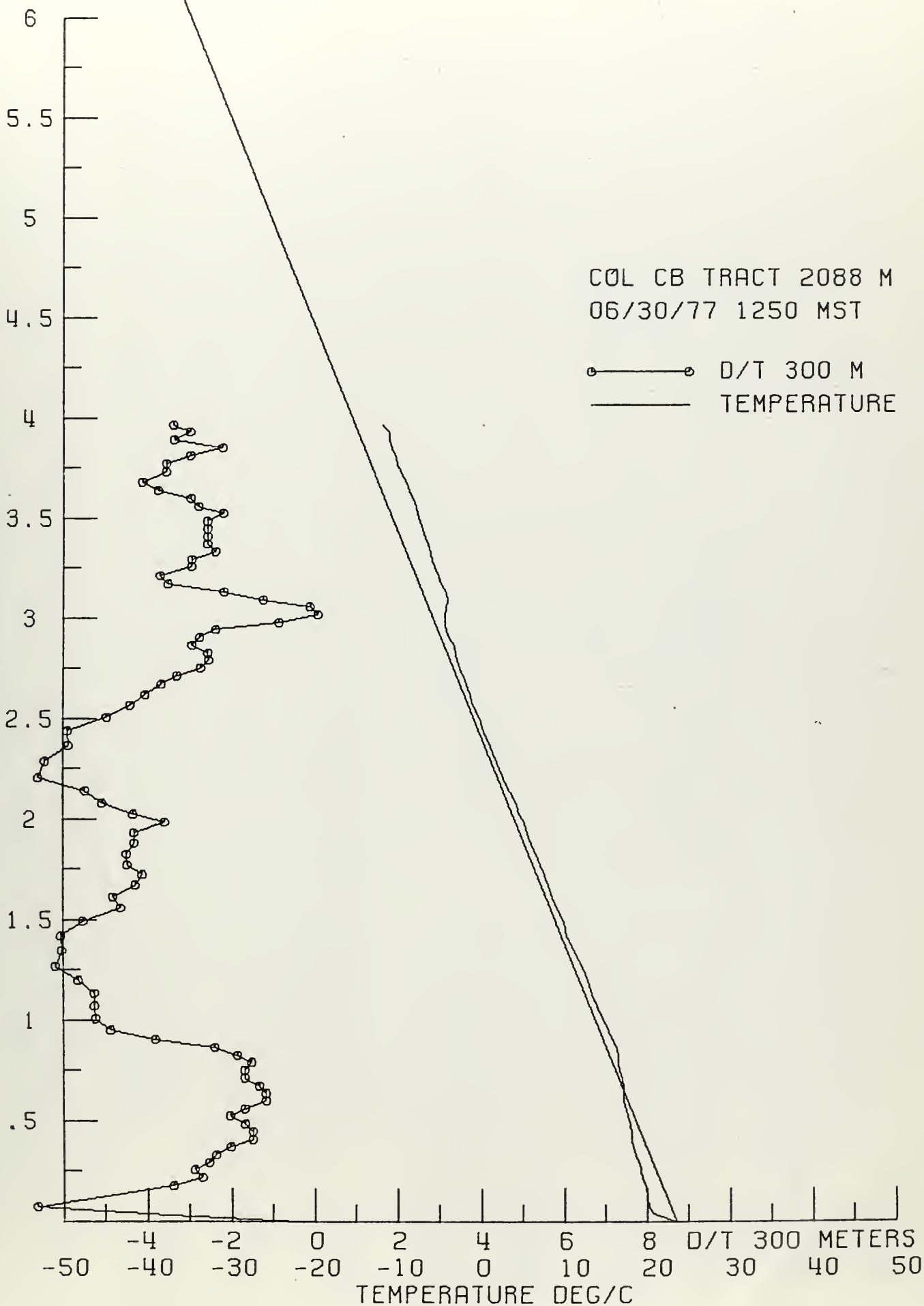


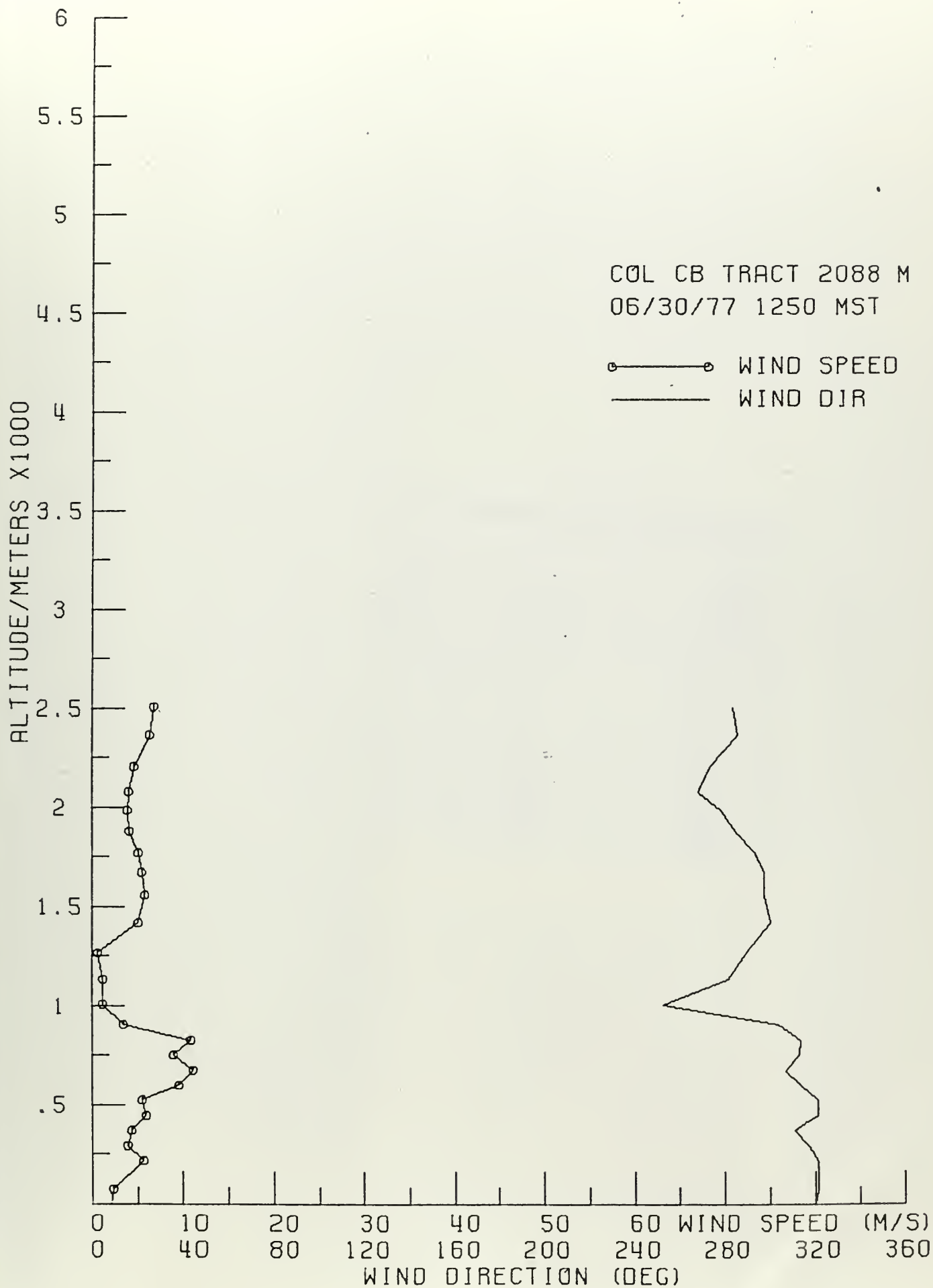


ALTITUDE/METERS X1000

C0L CB TRACT 2088 M
06/30/77 1250 MST

○—○ D/T 300 M
— TEMPERATURE





Form 1279-3
(June 1984)

BORROWER

IN 608-204 (25)

Monthly Program
for the F

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